











J. W. Nickerson.



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THIRD INAUGURAL ADDRESS

OF

HON. MORGAN ROTCH,

MAYOR OF NEW BEDFORD,

TO THE

CITY COUNCIL,

JANUARY 3d, 1887.



NEW BEDFORD:
MERCURY PUBLISHING CO., CITY PRINTERS.
1887.



ADDRESS.

GENTLEMEN OF THE CITY COUNCIL:

At the late municipal election, characterized by more than usual interest, we were selected by a large majority of votes to take charge of the affairs of the city for the present year. For this renewed evidence of confidence reposed in me by so large a number of my fellow-citizens, I am profoundly grateful, and it will be my constant endeavor so to act and so to speak, that at no time shall this trust appear to have been misplaced. But today, gentlemen, and for the municipal year upon which we have entered, we are to know neither majorities nor minorities. The parties of Dec. 7th cease to exist for us, and we are to recognize but one party, composed of all the people of our beloved and With consecrated purpose and with a beautiful city. solemn invocation to the all wise Ruler of nations for light and guidance, we are to devote our best energies of thought and action to the welfare of the whole city.

I now invite your attention to some of the important interests of the city.

FINANCIAL.

Allow me to call your attention to a review of our

city affairs in relation to the finances, the facts presented having been gathered from statements furnished by the city treasurer and collector of taxes.

Collection of Taxes.

The assessments for the year were	\$532,526.95
Amount collected,	484,140.89
Balance of taxes uncollected,	\$48,386.06

The credits to the collector were as follows:

Paid state tax,		\$27,015.00
Paid county tax,		33,883.77
Paid city treasurer,		398,397.07
Discount,		23,948.86
Abatements by the assessors,		896.20
Total,		\$484,140.89

About $9\frac{9}{100}$ per cent. of the whole assessment of 1886 remains unpaid at this date, a larger amount than ever before, this increase being caused by the failure on the part of four of the five of the national banks to pay the tax assessed upon their shares.

National bank tax unpaid,	\$62,080.00
Amount due the state,	29,757.73
City's portion,	\$32,322.27

Of the taxes of 1885 and previous years, the collections amounted to \$8,897.87.

No settlement with the commonwealth has been made for two years, in the matter of bank taxes. The reason is that the question of the legality of these taxes has been raised by the banks and is now before the courts; and it has been judged by the city council to be more prudent to protect the rights of the city by deferring settlement with the commonwealth until some decision shall be reached. The amounts claimed by the state from the city on account of these taxes were

For 1885, And for 1886, \$39,756.00 39,208.85

Total.

\$78,964.85

Against this sum so retained by the city, the state retains \$81,624.51 of corporation taxes due the city for the same two years. If the position of the banks is correct, the city will ultimately have to pay the taxes collected from them for 1885, amounting to \$86,442.67, and will lose the amount of such taxes for 1886, not vet paid, amounting to \$62,080. It is very evident that some relief should be afforded the city by legislation during the present winter, that so large a proportion of our tax levy may not be prejudiced, and its collection attended with such difficulties, and I recommend that the city council speedily take measures to call this subject to the attention of the legislature and ask for relief. The injustice of the course pursued by the state, charging the city with the bank taxes that the city has never received and can only collect after years of litigation, will, I think, when presented to the general court, lead to some action favorable to the city.

RECEIPTS AND EXPENDITURES.

The receipts and expenditures the past year, including balance of cash in the treasury January 4th, 1886, have been as follows:

	CITY	DOCUN	MENT	No. 1.	January,
--	------	-------	------	--------	----------

Balance, Jan. 4th, 1886,	\$19,903.98
Received from collector:	
Taxes, 1886,	\$398,397.06
Taxes, 1885 and previous year,	8,897.87
Received from sundry parties, liquor licenses,	15,262.50
From other sources,	661,556.51 1,084,113.94
Total receipts, including balance,	\$1,104,017.92
Expenditures as per audits,	1,100,387.39
Balance Jan. 3d. 1887.	\$3,630,53

6

The amounts received on account of the water works are included in the foregoing statement.

Amount received from takers,	\$43,281.36
Amount received to Jan. 4, 1886,	40,172.24
Increase,	\$3,109.12

Appropriations.

The appropriations for the past year have been as follows:

General appropriations,		\$486,300.00
Special appropriations:		
Library addition,	\$8,500.00	
North Cottage street extension,	12,000.00	
Police station and lot,	14,000.00	
Improvement of French avenue,	8,000.00	
Cemeteries,	1,000.00	
Incidentals,	11,921.02	
Cypress street extension,	601.60	
Repairs of city property,	266.80	
Rockland street sewer,	32,689.09	
Other sewers,	13,034.92	102,013.43
	No.	

\$588,313.43

Total appropriations,

Water hands 7s

Special appropriations as above stated were	\$102,013.43
Deduct from this the amount of bonds issued for	
the construction of the Rockland street sewer, \$30,000.00	
Balance due from state of Massachusetts for cor-	
poration taxes, 2,559.66	
Balance of unappropriated funds, 6,500.00	39,059.66

Amount to be provided for the present year,

\$62,953.77

9160 000 00

Municipal Debt.

The indebtedness of our city at this time, both permanent and temporary, may be stated as follows:

water bonds, 7s,		\$160,000.00
Water bonds, 6s,		360,000.00
Water bonds, 5s,		100,000.00
Water bonds, 4s,		100,000.00
Bridge bonds,		20,000.00
Sewer bonds, 4s,		50,000.00
Sewer bonds, 3½s,	· ·	60,000.00
Improvement bonds, 6s,		223,000.00
Improvement bonds, 3½s,		105,000.00
Total,	\$	1,178,000.00
Add to this the trust funds, as follows:		
Sylvia Ann Howland bequest,	\$100,000.00	
Library funds,	4,100.00	
Cemetery funds for the care of lots,	4,084.93	108,184.93
	\$	1,286,184.93
Temporary debt,		70,000.00
Total,	\$	1,356,184.93
Deduct from this sum:		
Balance of cash Jan. 3, 1887,	\$3,630.53	
Amount due from the state,	2,559.66	
Taxes collectable, including the national bank		
tax of 1886,	72,755.96	
Sinking funds,	17,161.49	96,107.64
Net debt at this date,	\$1	1,260,077.29

The issue of bonds during the year 1886 was as follows:

Improvement bonds, $3\frac{1}{2}$ s, Sewer bonds, $3\frac{1}{2}$ s,

\$25,000.00

Total,
Payment of bonds, old issue,

\$85,000.00 35,000.00

Increase of permanent debt,

\$50,000.00

With a view to understanding the questions with which the city council will have to deal in providing for carrying the city through the coming year and meeting our current expenditures, I invite attention to the following figures. The present law permits a tax levy of only \$12 on the \$1000, based on the average valuation for three previous years, to meet all requirements of the city except state and county taxes and interest and principal on our permanent For the current year such valuation will be presumably not far from \$31,648,452. Twelve dollars on \$1000 of this valuation will provide for the year about \$379,781. But we enter upon the year with a special appropriation of \$62,953.77 to be taken care of out of the above, leaving available for the year, \$316,-To this sum the estimated receipts into the treasury from various sources may be added, but with the absence of receipts from liquor licenses, and the uncertainty affecting the collection of bank taxes and the consequent failure to obtain credits otherwise due from the state, such receipts cannot be safely relied upon to exceed \$4000, which added to the above sum of \$316,827.23 would give \$320,827.23 as the amount available for our expenditures. This sum, which is \$50,800 less than the

sum appropriated for city purposes last year, we cannot exceed unless we add to our bonded debt. I do most earnestly hope that it may not be necessary to resort to that expedient. It does not seem to me to be a healthy administration of our affairs, to go on increasing our permanent indebtedness. Sooner or later the effect must be to increase our difficulties and impair our credit. We have of late been adding to this debt at the rate of about \$50,000 a year on the average. This result has been largely brought about, in my judgment, by the law limiting taxation to \$12 per \$1000. I invite the attention of the city council to the ill effect of this law upon our city. It seems to me that legislation might also well be asked upon this matter, to the end that we may be enabled to adopt the principle of paying as we go, and not leave to the future the paying of large sums that ought to be now paid by us. At any rate, under the present conditions, we have but \$320,827.83 for city purposes this vear unless we go in debt, and rigid economy is thereby demanded and appropriations should be made in this vein. The needs of those departments not so essential to carrying on the functions of the city must yield to the greater claims of our schools, poor, streets, fire, police and others. These considerations will no doubt commend themselves to the city council and be recognized in its action.

WATER WORKS.

It is now seventeen years since water was first introduced into this community. The whole system of distribution, with its various appliances, was then new, and for many years the expenditures needed for repairs were not large. But as the years go by, the constant wear compels extensive repairs or renewal.

During the past year it has been found necessary to devote a large amount to repairs of an extraordinary nature, the completion of which places the several parts in condition to withstand the wear and tear of active service for many years.

The work of enlarging the pumping capacity is now fully completed, for which an appropriation of \$100,000 was made by the city council in February, 1884. Of this appropriation there now remains a balance of about \$4000. It is very gratifying to be able to call the attention of our citizens to the fact that notwithstanding the magnitude of the operations for increasing the pumping facilities, with the innumerable details of the same, including an addition to the pumping house building, new engine, large force main, and the necessary connections with the receiving and distributing reservoirs, all has been accomplished at an expense within the estimates and appropriations, a result which reflects great credit upon the department. With these needed additions, our pumping facilities and connections, it is believed, are not excelled in completeness and arrangement by those of any city.

The low condition of the water in the storing reservoir during the past fall was the cause of much anxiety and alarm to those who administered the affairs of this department. When the water on Oct. 11, 1886, fell to a level sixty-eight inches below high water, it had

reached the lowest point recorded since the storing reservoir was first filled. But unlike former years, it continued still to fall and with increasing rapidity. With every indication of an entire failure of the supply before them, the water board fully realized that to prevent such a calamity would require the most vigorous activity and effort in seeking a temporary additional supply. Directions were given for the clearing of the feeders of the Acushnet, and particularly the removing of all deposits from the water course known as the "Dry Swamp Ditch." It was expected by so doing to secure the flow from numerous springs believed to exist in that locality, and which it was thought would provide a supply sufficient to tide over the emergency. Full details of this operation, by means of which dangers incidental to a water famine were averted, will be found in the report of the superintendent.

This experience leaves no grounds for doubt that the city must provide more storage capacity to guard against the drought liable to occur each fall.

This permanent addition to our supply, as is already well known, is to be secured by drawing from the waters of either Long or Little Quittacas pond. There are advantages in both of these sources which are being well considered by the water board.

Long pond, with its eighteen hundred acres, leaves no question as to the adequacy of supply for many years to come. Its shores are for the most part sandy and pebbly, the water deepening very gradually. The water of Long pond, although somewhat whiter than the Acushnet, is more highly colored than that of Little Quittacas.

Little Quittacas pond contains a surface area of three hundred and twenty acres, being somewhat larger than our present storing reservoir. Its shores are remarkably free from water bushes and aquatic vegetation, and with the exception of a small swamp area at its northerly extremity, are sandy and rocky. The pond is largely supplied by active springs, which it is believed would vield more copiously as the pressure upon them is reduced by the water level being drawn down. Its water is considerably whiter than Long pond, and consequently much more attractive for domestic purposes. This beautiful sheet of water, taken in connection with our present storing reservoir, would unquestionably furnish a supply ample for a long period. But should a greater supply ever become necessary, a connection could easily be opened with Great Quittacas and the whole chain of Lakeville ponds which lie but a few hundred feet distant.

I believe it advisable to do as much work the coming season as will enable the keeping of the storing reservoir well filled through the entire summer season, thus hoping to improve the quality of the water during the heated term.

I commend the matter to the prompt attention of the council, and hope that such action will be taken as may be found necessary. No more important subject will, I believe, be presented for consideration during the present year.

At the same time, while providing for an increase in our supply, I trust that the question of stopping unnecessary waste of water may also be considered. A record of our daily consumption shows clearly enough that more water is consumed than ought to be. It is not good management to let this state of things continue. Among the remedies suggested by the board is the exercise of more care in respect to plumbing. There is reason to believe that great carelessness and defects in workmanship have characterized much of the plumbing in buildings erected under contract during the past few years, and large waste of water has been the result. The water board do not now possess the power to compel parties to furnish as high a grade of work as ought always to be placed in connection with our service pipes. An ordinance similar to that in other cities relative to plumbing, providing necessary control thereof, is under consideration, and will doubtless soon be presented to the council. It may also be worth while in this connection to consider whether an increase in the number of meters, so as to bring our city up to the average of other cities as to metered water, may not be desirable.

POOR DEPARTMENT.

In accordance with my recommendations to the city council about nineteen months ago, a committee of the council suggested certain changes in the constitution and election of members of the board of overseers of the poor, and in my last annual message I called attention to the

subject and advised the appointment of a committee to secure necessary legislation, which resulted in the passage of an act containing the changes relative to the board in accordance with my suggestion. This act was accepted by the city council Oct. 14th, 1886. In consideration of the very efficient services of the board in office during the past year, I deemed it but just to its members that they should be permitted to continue in office until the close of the year for which they had been elected. I trust and believe that the new board as constituted by the act, and the members of which were carefully selected for their fitness for the positions, will so conduct this department as will demonstrate the wisdom of the change and make this one of our most efficient departments. But let me here express my great satisfaction with the very faithful manner in which the members of the retiring board have performed their duties, and the success which has attended their management, which has resulted in a saving to the city of between \$6000 and \$7000.

It is also fitting to recall the service and worth of two members of the department who have died during the past year: of Atwood Holmes, who gave his unremitting attention as overseer, who carried into the discharge of all its attendant duties the same cheerful and kindly spirit which endeared him to so many of his fellow-citizens, and has left a void not only in the city but especially in this department, not easily to be filled; while of Charles A. Clarke, Jr., it is not too much to say that the knowledge and experience which he possessed relative to the conduct of the department of the poor was equalled by few if by any similar officers in the state.

PUBLIC SCHOOLS.

Our public schools continue to maintain the high standard which has given them an enviable reputation, and I have no doubt that the policy which has characterized their management in the past, and which has been so eminently successful, will continue to be pursued so long as our citizens insist upon the maintenance of that high character which the school committee has always held, by the election of members, who, like those who have held positions on the board in the past, will bring to their duties an earnest desire to advance the cause of education in our city, and a determined purpose to faithfully discharge their trust.

The presence of four women upon the school committee, in my judgment increases the capacity of that board to deal with the difficulties of public instruction, and the discipline and management of our schools.

Owing to the constantly increasing number of scholars and the consequent need of additional teachers, the expenses of the department have increased about \$6000 during the past year; but as I have previously said, I believe no appropriation is ever asked for in excess of actual needs, and such an amount I am sure the city council will be ever ready to grant.

FIRE DEPARTMENT.

I can add but little to what I have previously said in regard to this department. The equipment is in excellent condition, and the work which has been required has been performed in the same thorough manner which has long characterized the department. The alarms have been more frequent than usual during the past year, and the total losses amount to \$25,628.68.

CEMETERIES.

The condition of our public cemeteries is, on the whole, satisfactory so far as relates to their appearance, care and management. But in one respect I think improvement can be made; that is, with regard to the title to the lots and the transfers and records of ownership.

Under the regulations of our ordinances, it is found that conflicting claims arise between those interested in the lots, that persons really the owners do not possess the legal evidence thereof; and uncertainty in many cases exists as to the rights of relatives.

I would suggest that this subject receive the consideration of the council, and that if possible some mode be adopted, which, while preserving that control in the city which ought to be preserved, will still leave the transfer of such lots, and records of transfer, similar to that of other real estate.

PUBLIC BUILDINGS.

The enlargement of the library building has been completed during the past year. The lower floor has been conveniently fitted for offices, which were much needed. The public library, which occupies the entire upper floor of this building, has now ample space for many years to come, and the fund for the purchase of books, which has been accumulating for some years, can now be utilized.

The City Hall building is very much out of repair and should have the immediate attention of the committee on city property.

The new building on Weld street will soon be completed and is conveniently arranged for the three purposes for which it is designed, namely, police station, ward room, and hook and ladder or engine house.

STREET LIGHTS.

I have already alluded to the importance, I may say the absolute necessity, of retrenchment and economy in our expenditures. And I believe this can be practiced in regard to our street lights with less inconvenience to our citizens than anywhere else. Some people may think it is a pleasant thing to have the city illuminated with electric lights from one end to the other, but we must remember that it is a most expensive luxury, and one in which, in my judgment, we have already indulged too lavishly. In a few of the main thoroughfares of the city it may be well enough to have them, but scattered here and there in other parts of the city, often displacing only two or three gas lights, they are, in the opinion of very many, more than useless. They seem to make the darkness more profound as one passes from the immediate range of the light. In view of the absolute necessity of retrenchment in some departments, I recommend not only that no increase of the electric lights should be made, but that the number we now have should be reduced.

STREETS AND SEWERS.

Our city is growing rapidly and we are frequently asked to accept streets and lay sewers. We cannot do all that is asked, and I submit that you should deliberate well, in view of the state of our finances, as to how much of and where this work should be done. The feeling of our citizens in favor of streets fifty feet wide is growing and should be recognized by you wherever practicable.

A special appropriation of \$8000 for repairs of the Point road was made during the past year and that beautiful drive, which is justly the pride of our city, is now in better condition than ever before, and with a small annual outlay can be kept in good repair for many years to come. Fifteen hundred dollars of the appropriation was used for the purchase of a gravel hill, a large portion of which still remains and will be available hereafter for the above purpose.

A large addition to our sewerage system, designed to drain the extreme southwestern and western portions of our city, was commenced the past year by the construction of a large trunk sewer in Bonney and Rockland streets. It will be advisable to continue this work to some extent the coming year.

I wish to express my satisfaction with the general good management of this department and the thorough and business-like manner in which all work has been performed.

The knowledge which our present superintendent has gained by his continued service is valuable to the city, and suggests the advisability of amending the ordinances so that the superintendent of streets may be elected for a longer term than at present.

POLICE DEPARTMENT.

The matter of the sale of intoxicating liquors is one that arises each year and presents more difficulties than any subject with which municipalities have to deal. It has seemed to many that it should be courageously settled by the legislature by a law operating alike all over the commonwealth and not varied by the votes of localities. However this may be, all will concede that the question of license is a disturbing element in our municipal affairs, but all do not yet agree whether such disturbance is an advantage or disadvantage to these affairs.

We must take the law, however, as we find it; and by that law we are permitted each year to discuss the question and weigh the various considerations that can be urged for and against licenses and then the matter is finally submitted to the votes of our citizens.

In the election that has just transpired the greatest interest has been taken in this discussion and by the votes of a majority of our citizens it has been decided that no licenses shall be granted of the classes which are the subject of such votes.

That decision binds all. The foundation upon which our whole government rests is obedience to its laws by our people and their faithful execution by our magistrates. It has seemed useful to me to present these suggestions, even though I repeat what has often been more forcibly expressed, that we may each have our attention called to our respective duties and properly appreciate them.

Personally I have always been of the opinion that the most desirable results are obtainable from licensing the sale of liquor. Our citizens have, however, decided otherwise. That decision leaves us no other alternative as honest men than to obey the law and faithfully execute it.

The duty of enforcing all the laws in our city devolves particularly upon our police. It has always been my desire that this department should go forward in the impartial discharge of its duty, unfettered by improper restraint; that no law should be singled out for enforcement or non-enforcement, but that the same rule of duty should apply to all. By no act or intimation have I ever authorized the police of our city to do aught but their whole duty, nor shall I ever do so. The charter and ordinances, while they make the mayor the chief executive officer of the city and require the obedience of the police to him, do not intend that he shall be a policeman or detective, but their requirements are intended to be satisfied by the selection of competent men and such a supervision over their conduct as will secure an efficient department.

CONCLUSION.

And now in closing this, in all probability my last inaugural address, let me urge upon you the importance of doing well whatever you undertake to do. In this way you will find the duties assigned you less irksome in the doing and the gratification in their completion infinitely greater.

Pardon me also as I again try to impress upon you, upon the old as well as upon the new members, the importance of punctuality in attendance and promptness in the execution of work assigned you. Your time is given without compensation and any unnecessary appropriation of it by any one member is an injustice to all.

As I listened to the roll-call read by the clerk, I missed the names of most of those who, two years ago, entered with me upon the discharge of municipal duty. One of this number has been summoned to higher duty. His honest, faithful and unremitting service, freely and gladly given, entitle him to special mention here today; and whenever and wherever the name of John M. Bamford is spoken we shall all recall an upright man and a devoted worker for the welfare of the city. And for the others, whatever may be the cause of their absence to-day, it cannot be charged to any neglect on their part. For seldom, if ever, has the city had in its service a more faithful body of workers than those with whom I have had the honor to be associated. Our best wishes for their welfare will go with them whithersoever their paths lead them, and to the new members who have come to fill their places we extend a cordial welcome.

And so with closed ranks, with earnest and deter-

mined purpose, with no backward looks, but with eyes steadily fixed upon the coming days, let us enter, hopefully, confidently, upon the discharge of the duties assigned us.





CITY GOVERNMENT,

1887.

MAYOR.
MORGAN ROTCH.

ALDERMEN.

Ward 1—SIMEON HAWES.
Ward 2—CHARLES W. COGGESHALL.
Ward 3—CHARLES S. ASHLEY.
Ward 4—EDWARD T. PIERCE.
Ward 5—WENDELL H. COBB.
Ward 6—MONROE HOLCOMB.

CITY CLERK.

DANIEL B. LEONARD.

TREASURER AND COLLECTOR OF TAXES.

JAMES H. HATHAWAY.

CITY AUDITOR.
WILLIAM B. TOPHAM.

CITY MESSENGER.
AUGUSTUS D. PIPER.

COMMON COUNCIL.

President—WILLIAM A. CHURCH.

Ward One.

Ward Four.

EDWARD F. DAHILL, JAMES W. KANE, ROBERT ARNETT, JR., EMERSON SMITH. STEPHEN A. BROWNELL, STEPHEN D. PEIRCE, EUGENE R. LEVERETT, FRANK E. SAWIN.

Ward Two.

Ward Five.

LOUM H. FAUNCE, GEORGE PICKENS, JEREMIAH M. TABER, JOHN L. GIBBS. WILLIAM A. CHURCH, ROBERT SNOW, MICHAEL DUGAN, FREDERICK A. BRADFORD.

Ward Three.

Ward Six.

WILLIAM M. BUTLER, GILBERT K. BROWNELL, JOHN A. GOMLEY, CHARLES O. BRIGHTMAN. FREDERICK W. MOSHER, CHARLES J. McGURK, WILLIAM B. SMITH, JOHN A. LEE.

CLERK-WILLIAM A. MACKIE.

STANDING COMMITTEES OF THE BOARD OF MAYOR AND ALDERMEN.

- On Police—The Mayor, Aldermen Coggeshall and Pierce.
- On Licenses Aldermen Cobb, Holcomb and Ashley.
- On Laying out, Widening and Repairing Streets—The Mayor, Aldermen Pierce and Holcomb.
 - On Burial Grounds-Aldermen Coggeshall, Hawes and Ashley.
 - On Enrollment Aldermen Hawes, Cobb and Ashley.
 - On Soldiers' Aid—The Mayor, Aldermen Cobb and Holcomb.

JOINT STANDING COMMITTEES OF THE CITY COUNCIL.

- On Finance—The Mayor and Alderman Pierce, the President of the Common Council, and Councilmen E. Smith, Faunce, Brightman, Sawin and Mosher.
- $\ensuremath{\textit{On Audit}}\xspace \ensuremath{\mathsf{Aldermen}}\xspace$ Peirce and Coggeshall, Councilmen Peirce, Sawin and Lee.
- On City Property Aldermen Coggeshall and Holcomb, Councilmen Snow, Leverett and Faunce.
- On Fuel—The Mayor and Alderman Hawes, Councilmen Leverett, Wm. B. Smith and Dahill.
- On Education—Aldermen Cobb and Ashley, Councilmen McGurk, Butler and Bradford.

On Fire Department — Aldermen Pierce and Ashley, Councilmen Dugan, Peirce and Gomley.

On Roads, Bridges and Sewers—Aldermen Cobb and Hawes, Councilmen Leverett, Lee and Arnett.

On Charities, Almshouse and the Poor—Aldermen Holcomb and Coggeshall, Councilmen Dugan, Mosher and G. K. Brownell.

On Street Lights—Aldermen Coggeshall and Pierce, Councilmen S. A. Brownell, Snow and Sawin.

On Printing—Alderman Pierce, Councilmen S. A. Brownell and Brightman.

On Buildings in the Fire District—Aldermen Ashley and Holcomb, Councilmen Gomley, Gibbs and McGurk.

On Armories and Military Property — Aldermen Holcomb and Ashley, Councilmen Gomley, Taber and G. K. Brownell.

On Water Works and Water Supply—Aldermen Pierce and Cobb, Councilmen Peirce, Sawin and Kane.

On Claims—Aldermen Cobb and Coggeshall, Councilmen William B. Smith, Bradford and E. Smith.

On Ordinances—Aldermen Cobb and Coggeshall, Councilmen Snow, S. A. Brownell and Pickens.

STANDING COMMITTEES OF THE COMMON COUNCIL.

On Elections and Returns—Messrs. Leverett, Wm. B. Smith and Arnett.

On Bills in Second Reading - Messrs. Mosher, Dahill and Butler.

 $\it On\ Enrolled\ Ordinances\ and\ Resolutions-Messrs.$ Kane, Gibbs and Pickens.

ASSESSORS.

Office, Library Building.

DAVID B. WILLCOX, Chairman, 1 year.

CHARLES D. TUELL, 3 years. WILLIAM A. RUSSELL, 2 years.

ASSISTANT ASSESSORS.

Ward 1—JOHN K. SMITH.

Ward 2—

Ward 3—JOHN H. C. AUSTIN.

Ward 4-MARSHALL T. MILLS.

Ward 5-JOHN D. RODGERS.

Ward 6-FRANK PAUL.

BOARD OF HEALTH.

Office, City Hall Building.

JAMES D. THOMPSON, Term expires February, 1888. WILLIAM N. SWIFT, Term expires February, 1889. NATHANIEL HATHAWAY, Term expires February, 1889.

JAMES D. THOMPSON, Chairman.

WILLIAM N. SWIFT, City Physician and Quarantine Physician. The City Physician is ex officio a member of the Board.

HEALTH INSPECTOR.
WILLIAM E. MACOMBER.

NEW BEDFORD WATER WORKS.

NEW BEDFORD WATER BOARD.

His Honor MORGAN ROTCH, Mayor, ex officio President.

WILLIAM A. CHURCH, President of the Common Council, ex officio.

WILLIAM N. CHURCH, Term expires June, 1887.

HENRY HOWARD, Term expires June, 1888.

DAVID B. KEMPTON, Term expires June, 1889.

CLERK.

ROBERT C. P. COGGESHALL.

WATER REGISTRAR.

JAMES H. HATHAWAY.

Office, Room 2, Library Building.

SUPERINTENDENT.

ROBERT C. P. COGGESHALL.

Office, City Hall Building.

INSPECTOR.

LOUIS H. RICHARDSON.

Office, Room 2, Library Building.

COMMISSIONERS OF SINKING FUND.

ISAAC W. BENJAMIN, Term expires March, 1890.
WILLIAM H. MATHEWS, Term expires March, 1889.
WILLIAM A. CHURCH, Term expires March, 1888.

ISAAC W. BENJAMIN, Chairman.

JAMES H. HATHAWAY, Secretary and Treasurer.

OVERSEERS OF THE POOR.

GEORGE S. HOMER, CHARLES B. H. FESSENDEN, JONATHAN HOWLAND, JR.,

Term expires May 1, 1890. Term expires May 1, 1889. Term expires May 1, 1888.

SECRETARY—C. B. H. FESSENDEN. Assistant—ELLA F. BUCKLIN. SUPT. OF ALMSHOUSE—PELEG S. MACY. PHYSICIAN—JAMES H. KINGMAN.

FREE PUBLIC LIBRARY.

TRUSTEES.

Ex officio. Terms expire January, 1888.

MORGAN ROTCH, Mayor of the City.
WILLIAM A. CHURCH, President of the Common Council.
WENDELL H. COBB, Alderman and Chairman of the Committee of
the City Council on Education.

Elected by the City Council.

GEORGE H. DUNBAR, GEORGE HOWLAND, JR., ISAAC B. TOMPKINS, JR., MATTHEW C. JULIEN, ARTHUR G. GRINNELL, LEONARD B. ELLIS, Term expires April, 1890. Term expires April, 1890. Term expires April, 1888. Term expires April, 1888. Term expires April, 1889. Term expires April, 1889.

PRESIDENT OF THE BOARD.

THE MAYOR.

CLERK.

GEORGE H. DUNBAR.

COMMITTEES.

On the Library—The Mayor, George Howland, Jr., Cobb and Julien. On the Building—Messrs. Church, Tompkins and Ellis. On Binding and Blanks—Messrs. Grinnell and Dunbar.

SUPERINTENDENT OF THE LIBRARY. GEORGE H. DUNBAR.

LIBRARIAN.

ROBERT C. INGRAHAM.

ASSISTANT LIBRARIAN.
WILLIAM L. R. GIFFORD.

ASSISTANTS.

JOSEPHINE A. MERRICK,

MARY E. BROWN,

SUSIE H. GAMMONS.

JANITOR.

YORICK W. AMES.

CITY SOLICITOR.

ARTHUR E. PERRY.

Office, 36 North Water street.

SUPERINTENDENT OF STREETS AND SEWERS.

NATHANIEL H. GREENE.

Office, Library Building.

SUPERINTENDENT OF BURIAL GROUNDS.

WILLIAM SANDERS.

Office at Sanders & Barrows, 67 and 69 William Street.

SEALER OF WEIGHTS AND MEASURES.

JIREH C. SHERMAN.

INSPECTOR OF BUILDINGS. FREDERICK MACY.

SUPERINTENDENT OF CITY CLOCK.

CLIFFORD BAYLIES.

CITY BELL RINGER.

ISAAC BARNES.

CITY LÁND SURVEYOR.

ALBERT B. DRAKE.

HARBOR MASTER.

HENRY L. PITMAN.

SUPERINTENDENT OF BRIDGE AND DRAW TENDER.
JOHN B. NICHOLSON.

INSPECTOR OF PETROLEUM AND VINEGAR. HARRISON DELANO.

Office, No. 17 Middle street.

INSPECTOR OF MILK AND PROVISIONS. SAMUEL H. DAMMON.

Office, 71 William street, Waite's Building.

REGISTRARS OF VOTERS.

HERBERT A. BLACKMER, THOMAS F. DESMOND, EMANUEL SULLAYOU, Term expires May, 1890. Term expires May, 1888. Term expires May, 1889.

DANIEL B. LEONARD, City Clerk, ex officio.

Office, Basement City Hall Building.

PRECINCT OFFICERS.

Term of office expires Nov. 1, 1887.

WARD 1, PRECINCT 1.

Warden, WILLIAM J. ARIGAN, D. Clerk, WARREN P. TOBEY, R. Inspector, MAURICE C. DAHILL, D. "EDGAR F. TRIPP, R.

Deputies.

Warden, STEPHEN FINNELL, D. Clerk, WILLIAM BAMFORD, R. Inspector, JOSEPH DAWSON, D. "JOHN F. KIRK, R.

WARD 1, PRECINCT 2.

Warden, GEORGE P. MACOMBER, R. Clerk, K. CLIFTON TERRY, D. Inspector, SAMUEL T. ELDRIDGE, R. MICHAEL F. KANE, D.

Deputies.

Warden, GEORGE W. HILLMAN, R. Clerk, MICHAEL E. SULLIVAN, D. Inspector, GEORGE B. BORDEN, R.

"DANIEL J. SULLIVAN, D.

WARD 2, PRECINCT 3.

Warden, JACOB B. HADLEY, D. Clerk, JOHN L. GIBBS, 2D, R. Inspector, GEORGE T. HADLEY, D. "STANDISH BOURNE, R.

Deputies.

Warden, GIDEON D. GIFFORD, D. Clerk, CHARLES T. BURGESS, R. Inspector, SAMUEL C. FAUNCE, D. "THOMAS C. ROBBINS, R.

WARD 2, PRECINCT 4.

Warden, DAVID W. HOLMES, R. Clerk, J. FRANKLIN KEENE, D. Inspector, GEORGE K. DAMMON, R. JOSEPH P. CLARK, D.

Deputies.

Warden, LOUM H. FAUNCE, R. Clerk, ALLEN W. TINKHAM, D. Inspector, SAMUEL R. BROWNELL, R. "CHARLES L. CHURCH, D.

WARD 3, PRECINCT 5.

Warden, CHARLES S. ASHLEY, D.
Clerk, JAMES D. ALLEN, R.
Inspector, JOHN NOTTER, D.

"LYCURGUS H. HOWLAND, R.

Deputies.

Warden, HORATIO G. DEAN, D. Clerk, CHARLES H. ADAMS, R. Inspector, HENRY F. HAMMOND, D. "SAMUEL H. PERRY, R.

WARD 3, PRECINCT 6.

Warden, HENRY SMITH, D.
Clerk, B. FRANKLIN WORDELL, R.
Inspector, STEPHEN W. McFARLIN, D.
"BRADFORD V. DURFEE, R.

Deputies.

Warden, JAMES C. STAFFORD, D. Clerk, MYRON W. BROWNELL, R. Inspector, CHARLES W. HOWLAND, D. WILLIAM E. JOHNSTON, R.

WARD 4, PRECINCT 7.

Warden, WILLIAM B. TOPHAM, R. Clerk, WALTER R. MYRICK, D. Inspector, AUGUSTUS D. PIPER, R. "FREDERICK A. BROWNELL, D.

Deputies.

Warden, JAMES B. RUSSELL, R. Clerk, GEORGE S. HOYT, D. Inspector, CHARLES N. ALLEN, R. "GEORGE P. GIFFORD, D.

WARD 5, PRECINCT 8.

Warden, WILLIAM H. SHERMAN, D. Clerk, ALBION T. BROWNELL, R. Inspector, JAMES W. DUGAN, D.

"JOHN K. MCAFEE, R.

Deputies.

Warden, HENRY A. GRAY, D. Clerk, ARTHUR C. SPOONER, R. Inspector, ISAAC C. SHERMAN, D. "WILLIAM GORDON, Jr., R.

WARD 5, PRECINCT 9.

Warden, J. ARTHUR TAYLOR, R. Clerk, WILLIAM L. R. GIFFORD, D. Inspector, HENRY S. SWAIN, R.

"JOSEPH H. BELL, D.

Deputies.

Warden, EDWARD D. MANDELL, JR., R. Clerk, DAVID H. MORRISSEY, D. Inspector, ROBERT R. TOPHAM, R. "WILLIAM A. DEAN, D.

WARD 6, PRECINCT 10.

Warden, JAMES R. DENHAM, R. Clerk, LEANDER A. WILLISTON, D. Inspector, HENRY B. WORTH, R. '' Vacant.

Deputies.

Warden, HERBERT S. PIERCE, R. Clerk, GEORGE E. BRIGGS, D. Inspector, CHARLES F. BRIGGS, R. GEORGE NELSON, D.

WARD 6, PRECINCT 11.

Warden, HERBERT B. GARDNER, R. Clerk, N. HERBERT GREENE, D. Inspector, WILLIAM W. BONNEY, R. E. EDWARD ENOS, D.

Deputies.

Warden, CLARENCE R. SHERMAN, R. Clerk, JAMES P. TAYLOR, D. Inspector, MARSHALL S. GREENE, R. "MICHAEL STAPLETON, D.

VOTING PRECINCTS.

WARD ONE.

Precinct 1. All that portion of said ward lying northerly of a line drawn through the centre of Cedar Grove, Purchase. Linden, Ashland and Durfee streets, thence continuing in a straight line to the boundary line between the town of Dartmouth and the city of New Bedford.

Voting place, Edgerton's Hall, 693 Purchase street.

Precinct 2. All that portion of said ward lying southerly of the aforesaid division line.

Voting place, Howland Chapel, 588 Purchase street.

WARD TWO.

Precinct 3. All that portion of said ward lying east of a line drawn through the centre of Thomas. Sycamore and County streets, to a point at the intersection of a line formed by the extension of a line through the centre of Franklin street.

Voting place, Ward room on Willis street.

Precinct 4. All that portion of said ward lying west of the aforesaid division line.

Voting place, carpenter shop of Loum H. Faunce, rear of 57 Parker street.

WARD THREE.

Precinct 5. All that portion of said ward lying east of a line drawn through the centre of Summer street, from the centre of Middle to the centre of Maxfield street.

Voting place, Ward room Kempton street, near County.

Precinct 6. All that portion of said ward lying west of aforesaid division line.

Voting place, police station, Mill street, near Ash.

WARD FOUR.

Precinct 7. The entire ward, including the islands known and called Pope's and Fish island.

Voting place, City Hall.

WARD FIVE.

Precinct 8. All that portion of said ward lying easterly of a line drawn through the centre of Fifth street, from the centre of Wing street to the centre of Bedford street, thence through Bedford and South Sixth streets to the centre of Spring street.

Voting place, Ward room on Fourth street, near School.

Precinct 9. All that portion of said ward lying westerly of the aforesaid division line.

Voting place, No. 4 engine house, Bedford street.

WARD SIX.

Precinct 10. All that portion of said ward lying easterly of a line drawn through the centre of Fifth street, from its intersection with the centre of Wing street, thence through Grinnell, Fourth and Rivet streets, Acushnet avenue, Division and Water streets, to and along the centre of French avenue south to tide water.

Voting place, store No. 158 South Water street.

Precinct 11. All that portion of said ward lying westerly of the aforesaid division line.

Voting place, Ward room on Sherman street.

FIRE DEPARTMENT.

CHIEF ENGINEER.

FREDERICK MACY,

Term expires January, 1888.

Office, City Hall Building.

ASSISTANT ENGINEERS.

First—MICHAEL F. KENNEDY,
Second—LORING T. PARLOW,
Third—PLINY B. SHERMAN,
Fourth—AUGUSTUS A. WOOD,
Term expires January, 1890.
Term expires January, 1889.
Term expires January, 1888.

CLERK OF BOARD OF ENGINEERS.

LUTHER G. HEWINS, JR.

POLICE DEPARTMENT.

CHIEF.

JAMES L. WILBER, Acting,

73 State street.

CAPTAINS.

LUTHER M. DAYTON, JAMES L. WILBER,

194 Summer street.
73 State street.

LIEUTENANTS.

DANIEL A. BUTLER,
THOMAS W. COMSTOCK,
FREDERICK HUSSEY,
ELLERY PEIRCE,
SETH E. BRYANT,

57 Maxfield street.
Parker street, 2d west of Shawmut ave.
46 State street.
1 Court street.
1 Mt. Pleasant street.

HEALTH INSPECTOR.

WILLIAM E. MACOMBER,

15 Sherman street.

PATROLMEN.

LEMUEL D. ADAMS, EDGAR W. ALLEN. TIMOTHY C. ALLEN, JAMES W. ARNETT, JOHN W. BRADY, MILTON A. BROWNELL, HENRY W. BUMPUS, PATRICK CANNAVAN, WILLIAM J. CLARK, JOSEPH H. DALEY, JAMES DOWDEN, WASHINGTON A. ELDRIDGE, THOMAS FAY, GEORGE E. GENDRON, JOHN H. GIFFORD, FRANKLIN L. HATHAWAY, THOMAS D. HOWLAND, DANIEL J. HUMPHREY, ARTHUR H. JONES, ISAAC M. JONES, JOHN M. JONES, PATRICK KENNEDY. DAVID G. KIRBY, ALLEN L. LEE, JAMES MITCHELL. WILLIAM H. MITCHELL,

54 Fourth street. Parker street, 1st west of Shawmut ave. 188 Grinnell street. 75 Willis street. 314 County street. 133 Fourth street. 78 Walden street. Chancery, north of Parker street. Corner Chancery and Parker streets. Pleasant street, north of Linden. 35 Mill street. Cor. Thomas and Sycamore streets. Corner Blackmer and First streets. 592 Purchase street. Central House, William street. 254 Fourth street. 103 Maxfield street. 212 Fourth street. 1 Mt. Pleasant street. 138 Hillman street. Cottage, south of Bedford street. 8 Borden street. Purchase street, opp. Central engine house. 5 Spruce street. Corner Maxfield and Park streets. 6 Maxfield street.

LEWIS S. MOORE, JR., ROBERT MOYNAN. CORNELIUS J. MURPHY. GEORGE W. PAIGE, JOHN C. PARKER, CRAWFORD S. PIERCE, JOHN C. ROOKS, ELISHA E. RUSSELL. JOHN SAVAGE, JOSEPH DE L. SISSON, HENRY STEVENS, TIMOTHY SULLIVAN. CHARLES H. TABER, THOMAS J. TAFT, GEORGE VOGEL, JOHN H. WILLIAMS, THOMAS H. WILSON, JOSEPH B. WING, JAMES A. WIXON, MOTIN YANCY,

28 Chancery street. 121 Cedar street. 16 Cannon street. 1 Court street. 593 Purchase street. 9 Bedford street. 190 So. Water street. 285 Acushnet avenue. 125 Allen street. 11 Elm street. 76 Bedford street. 62 Austin street. Cor. Purchase and Wamsutta streets. 490 Acushnet ave. Lindsey street. 27 Chancery street. 247 Middle street. 478 Purchase street. 57 William street. 9 Emerson street.

CONSTABLES.

THE MEMBERS OF THE POLICE FORCE, AND SAMUEL C. PERRY.

KEEPER OF THE LOCK-UP.

DANIEL A. BUTLER.

SPECIAL POLICE OFFICERS.

Allen, Lewis G., Allen, Thomas T., Allen, William H., Austin, John H. C., Barber, John R., Barker, Robert T., Barnes, Isaac, Bennett, Jeremiah H., Bently, Frank T., Blackwell, Scipio, Bliss, Frederick P., Bliss, William H., Booth, Benjamin T., Bradford, Edgar, Brock, Shubael F., Brown, William L. G., Clarkson, Nicholas J., Devine, Patick,

Buckley, Alfred R., Burding, Hiram, Burgess, Stephen, Burke, Michael I., Burke, William, Butts, Henry R., Jr., Butts, Squire W., Carr, Henry, Carr, James E., Carson, C. J. R., Chadwick, Charles T., Chase, Albert A., Chase, Ariel, Childs, Cyril M., Clark, William,

Clynes, Thomas, Collins, John, Conklin, Abraham, Corish, John, Corley, Maurice C., Cornell, Charles F., Cornell, Sidney I., Cornell, Stephen, Crafts, James, Cronin, Cornelius, Cushman, Frederick, Dammon, George K., Dammon, Samuel H., Davis, Otis A., Delano, Harrison,

Donaghy, Joseph, Duckworth, William A., King, Joseph T., Dugan, Edward, Dugan, James W., Damec, Peter, Durfey, Richard T., Eldridge, Samuel T., Engeland, George, Etchell, Edward, Ferguson, William, Finn, Michael, Fitzgerald, James, Flavin, Maurice F., Francis, Frank W., Fuller, Jonathan A., Geddis, Henry S., Gibbs, Preston, H., Gibbs, William H. H., Gifford, John, Grant, Lafayette, Greene, Marshall S., Harrington, J., Clark st., Miskell, John, Hicks, William, Hillman, George W., Hines, Henry S., Holden, George, Holloway, James T., Holmes, Ezra, Holmes, John J., Howard, Henry, Howland, Joseph B., Howland, William G., Jacob, Julien, Jay, James A., Jenifer, John H., Jenney, Ezra T., Johnson, Oscar, Johnson, W. H., Smith Phillips, Henry T., street, Jones, John M., Jordan, William, Joseph, John, Karcher, Fredk., Sr., Kelley, Hiram C., Kennedy, Thomas, Kent, James D. T.,

Kimball, Sylvester, Lapham, George W., Lawrence, Cyrus T., Leary, Dennis, Jr., Lincoln, Ellery C., Lincoln, John, Little, John E., Lumbert, John, Luther, Joseph P., McCarty, Bernard F., McCullough, Robert, McDermot, Michael, McGlynn, John, Macomber, H. M., Marr, William J., Marshall, Charles A., Martin, Henry T., Maxfield, Russell, Mehan, John. Miller, George, Morgan, Elias T., Morrison, Thomas, Netcher, George F., Nicholson, John B., Oliver, John, Omey, Joseph C., Otto, Frederick, Paine, Nathan L., Palmer, Robert, Parker, Charles W., Partington, William, Peckham, Samuel W., Peed, Thomas J., Peirce, Anthony, Jr., Perry, Samuel C., Pierce, Thomas H., Pinelle, Joseph, Pinkham, George W., Piper, Augustus D., Pitman, Henry L., Place, William, Jr., Pollock, John H., Quinn, Joseph,

Read, George P., Read, Richard A., Remington, John G., Reynolds, James R., Richmond, Josiah, Ritchie, David, Robbins, Charles H., Russell, George W. G., Russell, Henry C., Russell, James B., Salmon, John, Sampson, Warren W., Shaw, Thomas W. B., Shea, Michael J., Shields, Charles M., Small, David S., Smith, Henry, Smith, Henry H., Spooner, Caleb, Spooner, Joseph W., Staples, Elias, Stevens, Michael, Stopford, James I., Sullivan, John D., Taber, Charles H., Taber, Christopher C., Taber, Gideon L., Taber, William H., Taft, Daniel F., Tallman, Edward S., Taylor, Theodore, Taylor, William A., Thomas, Edward, Jr., Thomas, William W., Thompson, Thomas, Thomson, John H., Tinkham, John S., Tinkham, Otis, Townley, Richard, Tripp, Benjamin E., Tripp, Holder R., Tripp, Le Roy G., Tuell, Charles D., Underwood, Willis C., Warfield, James H., Watts, William H. C.,

Weeden, Charles H. L., Willis, Rufus H., Wilbur, Allen R., Williston, Hiram L., Wiley, James, Wilson, John,

Wood, Charles N., Wood, James A.

MEMBERS OF THE NEW BEDFORD PROTECTING SOCIETY.

(Special Police Officers to serve at fires.)

Akin, Francis T., Allen, Edward H., Allen, George H. H., Allen, Gideon, Jr., Allen, Gilbert, Boardman, Thomas, Bourne, Standish, Bly, O. Frank, Briggs, George E., Case, Charles A., Coggeshall, R. C. P., Dawson, Joseph, Denison, Henry C., Denison, John H., Dews, Edwin, Dias, Joseph, Dunham, Ernest A., Ellis, Heman, Fiske, Willis W., Gardner, Edward R., Gifford, Frank H., Grinnell, Edmund, Hadley, A. W., Hammond, Henry F., Handy, Jonathan,

Haskell, Charles M., Hillman, Charles B., Howland, John J., Kelley, Charles S., Kingman, G. D., Knowles, Thomas H., Lawton, Charles H., Lewis, Edgar R., Lowe, John H., Manchester, P. F., Maxfield, Edmund F., Nye, Willard, Jr., Paine, Charles L., Parker, James N., Parlow, George F., Perry, Arthur E., Pierce, Edward T., Pitman, William H., Plummer, Charles W., Potter, William F., Read, William F., Robbins, Arthur E., Robinson, William A., Rotch, Morgan, Richardson, Louis H.,

Russell, William A., Sanford, Gardner T., Shaw, Edward S., Smith, William T., Snow, Robert, Swift, Frederick, Swift, Leander H., Swift, R. W., Taber, Charles M., Taylor, Henry J., Taylor, Henry W., Taylor, William T., Terry, Francis C., Tillinghast, Joseph, Vincent, Mark T., Wade, Fred D., Washburn, F. A., West, William R., Wilbor, Alfred G., Wilde, Edmund L., Willis, William H., Wood, Edmund, Wood, Horace, Wood, Thomas F., Woodman, William O.

MEASURERS OF WOOD AND BARK.

Akin, John E., Allen, Abram A., Allen, Daniel E., Ashley, A. Davis, Bates, John A., Jr., Chace, Ira M., Comey, Charles M., Cobb, George A., Davis, John, Gammons, Edgar H.,

Greene, N. Herbert, Grinnell, Andrew B., Holmes, Albert W., Howland, Abram H., Howland, Ebenezer, Jenney, Ezra T., Leavitt, Clark, Leverett, Eugene R., Lawrence, Thomas W., Rhodes, Henry W., Lewis, Obed B.,

Lowe, John H., McFarlin, Stephen W., Moulton, Frederick F., Negus, Adnoniram S., Notter, John, Paisler, Charles S., Pickens, George, Potter, Edwin L., Shaw, Stephen E.,

Smith, John, Spooner, William E., Taber, Edward C., Tripp, Augustus C.,

Warfield, James H., Weeden, William W., Weeks, Henry T., Wilcox, Henry R.,

Wood, Elihu, Wordell, Wilson I.

January,

SURVEYORS OF LUMBER.

Beetle, John H., Briggs, Charles, Carpenter, George, Chase, Abram,

Croacher, Thomas W., Hayes, Lemuel W., Howland, John W., Jenney, Leonard,

Randall, Charles G., Sowle, Nathaniel P., Terry, C. A. V.

MEASURERS OF GRAIN.

Bowman, Seth G., Chace, Ira M.,

Comey, Charles M., Horton, Charles M., Taber, Gideon L.

WEIGHERS OF COAL.

Agard, Charles W., Bates, John A., Jr., Brownell, Charles E., Chace, Ira M., Comey, Charles M., Cornell, Sidney J., Corson, Henry T., Corson, James A., Hathaway, B. F., Jr., Hathaway, Charles R., Hathaway, Franklin, Hathaway, James L.,

Hathaway, John G., Holmes, Albert W., Howard, Henry, Howland, John J., Howland, Samuel A., Johnson, Benjamin W., Taber, Robert B., Lumbard, Joseph W., Negus, A. S., Neal, John A., Parker, Frank C., Reed, Edmund A., Sherman, Philip S.,

Shurtleff, Lewis T., Simmons, Eber C., Southwick, William H., Stanton, James E., Jr., Stevens, Dennis L., Tabor, Harry W., Tripp, John E., Wilbur, A. R., Wilson, Wallace B., Wordell, Wilson I.

CITY WEIGHERS.

Agard, Charles W., Akin, John E., Ashley, Roland R., Bates, John A., Jr., Borden, Prince S., Brownell, Charles E., Browning, Mrs. Clark, Brownson, Leonard, Card, Frederick W., Chace, Ira M.,

Chase, Ariel, Clare, William H., Cobb, George A., Comey, Charles M., Cornell, Sidney J., Corson, Henry T., Corson, James A., Davis, James, 2d, Duff, John, Field, Edward H.,

Gammons, Edgar H., Gibbs, Edward J., Gibbs, William H. H., Gifford, Charles H., Gifford, H. A., Jr., Gifford, James A., Gifford, Nathaniel W., Gifford, Richmond A., Gifford, Robert B., Grant, Lafayette,

Greene, Nathaniel H.,	Lee, John A.,	Spooner, Charles S.,
Haskell, Frank C.,	Lumbard, Joseph W.,	Stanton, James E., Jr.,
Hassett, James,	Macy, Frederick B.,	Stratton, Charles S.,
Hathaway, B. F., Jr.,	Maxfield, Russell,	Sullivan, Jeremiah,
Hathaway, Charles R.,	Murphy, James,	Taber, Robert B.,
Hathaway, Franklin,	Neal, John A.,	Tabor, Harry W.,
Hathaway, James L.,	Negus, A. S.,	Taft, Daniel F.,
Hathaway, John G.,	Norris, Thomas B.,	Tillinghast, Edward L.,
Holmes, Albert W.,	O'Conner, Cornelius,	Tobey, Franklin, Jr.,
Horton, Charles M.,	Parker, Frank C.,	Tripp, John E.,
Howard, Charles H.,	Potter, Edwin L.,	Wade, Waldo,
Howard, Henry,	Reed, Edmund A.,	Weeks, Henry T.,
Howland, Edward S.,	Rich, Walter I.,	Wilbur, Allen R.,
Howland, Samuel A.,	Sherman, Philip S.,	Wilson, Wallace B.,
Jenney, Ezra T.,	Silvester, Charles H.,	Wood, Henry L.,
Jennings, George L.,	Simmons, Eber C.,	Wordell, Wilson I.
Johnson, Benjamin W.,	Southwick, William H.	,

WEIGHERS OF BOILERS AND HEAVY MACHINERY.

Silvester, Charles H.,

Sisson, William H. H.

FENCE VIEWERS.

Cobb, George A.,

Russell, Allen.

POUND KEEPERS.

Cushman, Frederick, Otto, Frederick, Scott, Henry.

FIELD DRIVERS.

The Police, and Frederick Cushman, William H. Johnson (Smith st.), Frederick Otto, John G. Remington, Henry Scott.



1887—CITY DOCUMENT No. 3.

CITY OF NEW BEDFORD, MASS.

SEVENTEENTH ANNUAL REPORT

OF THE

NEW BEDFORD WATER BOARD,

TO THE

CITY COUNCIL,

CONTAINING

Ι.

The Report of the New Bedford Water Board for the year 1886.

11.

The Report of the Water Registrar.

III.

The Report of the Superintendent.

IV.

The Report of two Duty Tests of the Worthington High Duty Engine.

DECEMBER 31, 1886.

NEW BEDFORD: MERCURY PUBLISHING CO., CITY PRINTERS. 1887.

NEW BEDFORD WATER BOARD,

1887.

MORGAN ROTCH,

Mayor of the City.

WILLIAM A. CHURCH,

President of the Common Council.

WILLIAM N. CHURCH. HENRY HOWARD. DAVID B. KEMPTON.

CLERK OF THE WATER BOARD, AND SUPERINTENDENT.
ROBERT C. P. COGGESHALL.

WATER REGISTRAR.

JAMES H. HATHAWAY.

INSPECTOR.

LOUIS H. RICHARDSON.

FOREMAN.

FRANK M. ASHLEY.

OFFICE ASSISTANT.

CHARLES E. DRAKE.

PUMPING STATION.

ADONIRAM S. NEGUS, Pumping Engineer.

REPORT.

City of New Bedford.

Office of the New Bedford Water Board,
December 30, 1886.

To the City Council of the City of New Bedford:

Gentlemen: In accordance with the provision of the city ordinance, we now place before you the seventeenth annual report of the New Bedford Water Board.

Accompanying this document, and constituting a part of it, will be found the reports of the superintendent, city treasurer and water registrar. We make the following abstract from the report of James H. Hathaway, city treasurer and water registrar.

\$44,704,45

Balance, December 1, 1885,

Receipts for the year, all sources,	59,526.33
	\$104,230.78
The charges have been as follows:	
Expenditures for management and repairs,	\$36,314.89
Expenditures for ordinary extensions,	27,693.82
Expenditures for land on No. Water street,	900.00
Expenditures for temporary connection with Little Quittaeas	,
Pond,	1,503.81
Expenditures for increased pumping capacity,	11,712.45
	\$78,124.97
Which leaves a balance to the credit of the works on the	THE CONTROLL
books of the city treasurer, December 1st, 1886, of	\$26,105.81

The actual outlay for the construction of these works, December 1st, 1886, exclusive of debt, interest, and management and repair account, is \$1,259,402.21.

The report of the superintendent places before you a comprehensive statement concerning the operations of the past season, together with a full exhibit of the present condition of the works. It will be noticed that the expenditure for management and repairs is \$12,115.98 in excess of last year, and is the largest sum yet charged to that account during any one year. But it must be remembered that it is seventeen years since Acushnet water was first introduced into this city. Machinery after years of faithful service will wear out, and all appliances connected with a system of works of this nature must, after a lapse of time, be repaired or replaced. A sum larger than the excess stated above has been expended the past year in making repairs of an extraordinary nature, as follows, viz.:

Repai	rs McAlpine engine,	\$6,730.00
66	old Worthington engine,	1,929.04
66	old boiler settings and new feed pipes,	573.02
6.6	wasteway, storing reservoir,	2,234.68
"	gate house, " "	1,467.01
		\$12,933.75

The work represented by these items places the several parts in the very best of condition, and fully equal if not better than when new. As the result, years of constant service will be realized without any expenditure for repairs excepting those of a very trifling nature.

The character of these special repairs may be briefly described as follows, viz.:

At the storing reservoir the wasteway at the east end of the Wilson dam has been entirely reconstructed. This was necessary in consequence of serious damage to the structure caused by the unprecedented freshet of February 10-14. At the gate house of the Wilson dam new sluice gates replace those formerly in use. Both the McAlpine pumping engine and the older Worthington pumping engine have been most thoroughly repaired. By a change in the system of pump valves, the working capacity of the McAlpine engine has been raised from five million gallons per twenty-four hours to that of considerably over six million gallons, at the same time its duty has been increased. The work of extending the pumping capacity is now fully completed. A detailed statement of the cost may be found in the superintendent's report. The total net cost is as follows:

Appropriation, February 8, 1884, Net expenditure to December 1, 1886, \$100,000.00 96,057.54

Balance,

\$3,942.46

The entire pumping plant and all its connections, both with reservoirs and the distributing system, is now in the most perfect condition. That the cost of accomplishing all this work should fall within the limits of the original appropriation is a source of gratification to us and reflects great credit to those who had direct charge of this operation. The trial of the new "high duty" Worthington engine occurred early in the month of June and after receiving a satisfactory preliminary report from the board of experts who acted in our behalf, this engine was formally accepted on Friday, June 18. The final and detailed report of the board of experts respecting the engine is submitted as a part of this report. We desire in this connection to testify to the very satisfactory manner with which this contract has been executed. The operation of this engine since its acceptance seems to justify the anticipation that its future operation and performance will be satisfactory.

Eleven thousand four hundred forty-eight feet main distribution pipe has been added, making a total of $52\frac{0.6.6.5}{10.00000}$ miles now in use.

The number of service pipes has been increased 260; total number now in use 5225.

Forty-eight petitions have been received for extension of main pipe; of this number forty-four have been granted. The policy heretofore adopted by this Board in reference to requiring from all petitioners a guarantee that a rate shall be paid equal in amount to six per cent. of the cost to the city of laying the pipe has been continued.

Another portion of the new twenty inch leading main has been placed the past season in Pleasant street from Kempton north to the Common. During the coming year it is proposed to fill the remaining section, viz.: in State street from Linden street south to the Common, thence diagonally across the same to the corner of Pleasant and Pearl streets. It is also the intention to connect this pipe at the corner of State and Linden streets, with a pipe leading from the twenty-four inch main in Mount Pleasant street at Durfee. A contract for supplying the necessary amount of cast iron pipe and special castings needed for the extensions of the coming year, has been awarded R. D. Wood & Co., of Philadelphia, at prices varying from \$29.75 to \$32.25 per gross ton for the straight pipe, special castings 25 cents per pound. Curved pipe 3 cents per pound. The delivery to be made by April 15.

A somewhat startling phase of the water supply question was presented during the past Fall, viz.: the apparent total failure of the source of supply. The Board were called upon to face the situation, and to act promptly, dealing with a state of things not contemplated. Sixty-eight inches below high water was the lowest point ever touched in our storing reservoir. When that point was reached and still the water continued to rapidly fall lower, this

Board realized that some new supply must be sought without loss of time. The clearing out of the feeders of the Acushnet, and thereby possibly opening springs believed to exist in that region, and particularly the clearing out of that water course known as the "dry swamp" ditch, appeared to the Board as offering a possible relief. Elsewhere in the report of the superintendent will be found the particulars of that operation, by means of which the city was placed beyond all danger and losses which must have resulted from the failure of our supply.

This experience has emphasized the necessity for an additional source of supply for our wants. What before was only a probability has now become a certainty. More water must be had. The question as to where it can most conveniently be obtained is narrowed down to that of Long or Little Quittacas ponds.

While it does not appear necessary to spend further time in discussing the advisability of procuring more water, yet the experience of the past year admonishes us that another year should not pass without a permanent connection being made with another source of supply.

In 1878 this Board thought that Long pond offered the most favorable conditions; since then the advantages of Little Quittacas, with its superior quality of water and lower temperature in summer, its proximity to Great Quittacas and the whole chain of Middleboro ponds, have been forced upon the attention of this Board, and leads perhaps to the necessity of a revision of the former judgment in favor of Long pond.

Little Quittacas has a surface area of 320 acres, an area somewhat larger than our storing reservoir, but Little Quittacas is fed by direct active springs which if the pond is drawn upon would probably increase in activity and yield more copiously. Should it ever fail, Great Quittacas and the whole chain of ponds lie but a few hundred feet

away and in case of need could in a few hours also be drawn upon. As to the method of joining our storing reservoir with such proposed additional supply, we are of the opinion that it should be done with a view of ultimately making a connection independent of the storing reservoir, so that the old or new supply may be used at discretion.

We think it advisable to do so much work in the matter of such connection next year as would enable us to keep the storing reservoir well filled during the summer season, thereby possibly keeping the temperature of the water lower, and thus diminishing the algic growth which has caused so much annoyance in the past. This Board proposes, during the winter, to submit recommendations and estimates of the cost of this most needed addition to our source of supply, and does not doubt that it will receive such attention and action as its importance demands.

Another important matter which this Board desire to emphatically impress is the question of how our consumption may be decreased. The most feasible methods of accomplishing this result are mentioned in the superintendent's report to this Board. We urgently recommend the passage of an ordinance prescribing the quality of plumbing which shall be connected with the service pipes of our system. All such work to be done by competent plumbers, who shall have been licensed by this Board. This ordinance should make the Water Board sole judges, and should invest them with authority to decline to supply any fixtures which are not satisfactory. We shall submit for your consideration at an early date the draft of an ordinance intended to regulate this matter.

The annual convention of the New England Water Works Association was held in this city on June 17th, 18th, and 19th. The sessions were largely attended and were fruitful of much profit to those interested in the question of water supply. At the conclusion of the convention the

association became the guests of the city for a day, and were taken on a tour of inspection through our own works and visited objects of interest in this locality. The great advantage of this association to the science of water supply is generally recognized, and it is regarded by all municipalities as very desirable to foster the growth of this organization and to be selected as the place of their gatherings.

In conclusion, we desire to express our approbation of the efficiency and integrity of the officers and employees of this department, and to testify to the faithful and prompt discharge of the manifold duties devolving upon them.

All of which is respectfully submitted.

MORGAN ROTCH,
EDMUND WOOD,
WILLIAM N. CHURCH,
HENRY HOWARD,
DAVID B. KEMPTON,

New Bedford Water Board.

REPORT OF THE WATER REGISTRAR.

CITY OF NEW BEDFORD,

WATER REGISTRAR'S OFFICE,

December 1, 1886.

To the New Bedford Water Board:

Gentlemen: I herewith present to you the annual statement of my accounts as water registrar, for the year ending at this date.

The several accounts are arranged in the following order, viz.:

- 1. The receipts for the year from all sources.
- 2. A classified statement of disbursements for the year.
- 3. A recapitulation of the outlay for the year, showing the net expenditures under each head.
- 4. A general recapitulation of the outlay from the commencement of the works to this date.
- 5. The sources of income applied to construction account.
 - 6. Water debt and payment on account of same.

CREDITS TO THE NEW BEDFORD WATER WORKS.

Balance, December 1, 1885,

\$44,704.45

Receipts for water:

Rates, \$43,530.43

Appropriation, 12,000.00 \$55,530.43

Receipts on account of services:

Services, \$3,355.88

Meters, 239.26

Fines, 106.00 3,701.14

Received for mains:

Main pipe sold, 12.73

Receipts from other sources:

Sale of hay, \$139.40

Sale_of wagon, 33.30 Rents, 96.00

Wharfage, 13.33 282.03 59,526.33

Receipts, including balance, Dec. 1, 1885, \$104,230.78

Expenditures for the year, 78,124.97

Balance, eash in treasury, Dec. 1, 1886, \$26,105.81

EXPENDITURES FOR 1886.

MANAGEMENT AND REPAIRS.

Engineering and superintendence, \$3,145.98
Water registrar, inspection and clerk hire, 2,484.00
Fuel for pumping engine, 4,645.74
Engineers and firemen, 3,606.54

Repairs and supplies to engines:

Repairs to McAlpine engine, \$6,730.00 Repairs to Worthington engine, 1,929.04 Repairs to old boilers, settings, etc., 573.02

Oil, waste and other supplies, 648.61 9,880.67

Engine house and lot:

Maintenance, 76.71

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Main pipe,	\$374.80
Fountains,	76.66
Hydrants,	102.44
35.1	W 0 W 0

Meters, 56.59 \$610.49

Services:

Plumber,	\$380.15	
Repairs caused by change of grades, etc.,	156.12	
Repairs on private property,	93.50	
Cleaning taps and stops,	499.33	1.129.10

Reservoirs and conduit:

Repairs to reservoir,	\$991.16	
Repairs to conduit,	401.03	
Repairs to wasteway, Wilson dam,	2,234.68	
Penairs to gate house Wilson dam.	1.467.01	5.093.9

Incidental expenses:

Trial engine No. 3,	\$532.53		
Other expenses,	5,109.25	5,641.78	\$36,314.89

EXTENSIONS.

Mains:

Main pipe and special castings,	\$11,918.33	
Labor laying mains,	5,404.29	
Supplies and other expenses,	2,123.27	\$19,445.89
Stop gates,		1,140.00
Hydrants,		1,265.68
Watering eart hydrants,		213.77

Services:

bervice pipe, ieau and non,	\$1,100.11		
Labor,	1,818.08		
Supplies and expenses laying services,	847.05	\$4,460.30	
Fountains,		106.00	
Meters,		1,062.18	27,693.83

SPECIAL.

Land, North Water street,	\$900.00	
Temporary connection with Little Quittacas,	1,503,81	2.403.81

SPECIAL EXTENSIONS.

Engine house extension, including pump well,	\$1,584.11	
Repairs to engine house and old engine,	3,648.74	
New force main and connections,	13.77	
Weir tank at distributing reservoir,	49.23	
Worthington pumping engine, No. 3,	6,358.84	
Pumping station lot,	57.76	\$11,712.45

Total expenditures for the year,

\$78,124.97

NET EXPENDITURES UNDER EACH HEAD.

MANAGEMENT AND REPAIRS.

Outlay as above stated,	\$36.314.89
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Deduct from this amount:

Hay sold,	\$139.40
Wagon sold,	33.30
Rents,	96.00
Wharfage,	, 13.33
Fines,	106.00 388.03

\$35,926.86

EXTENSIONS.

Pipe, labor and	l expense	laving mains.	\$19,445.89

Deduct from this:

Pipe sold,	12.73
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\$19,433.16

SERVICES.

Outlay as above stated,	\$4,460.30
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Less amo	unt received	from takers,	3,355.88	1,104.42
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HYDRANTS, FOUNTAINS, METERS, ETC.

Ontlay as	above	\$3	787 63	3

Deduct from this:

		200 00	0 7 10 07	0.4.00= 0=
Meters sold.		-239.26	3.548.37	-24.085.95

SPECIAL.

New extensions,	11,712.45	\$14,116.2
Temporary connection with Little Quittaeas,	1,503.81	
Land North Water street,	\$900.00	

Net extensions for 1886,

\$74,129.07

CONDENSED STATEMENT.

DEBITS:

Net expenditures for the year,	\$74,129.07
Balance unexpended,	25,105.81 \$100,234.88

CREDITS.

Balance, Dec. 1, 1885,	\$44,704.45
Received for water,	55,530.43 \$100,234.88

GENERAL SUMMARY.

The whole outlay upon the works to this date has been as follows:

Conduit,	\$212,307.89
Dam,	18,845.24
Distributing reservoir,	73,740.62
Distribution,	577,571.91
Engine house and lot,	91,200.14
Engines and foundations,	88,169.46
Storing reservoir,	53,496.06
Receiving reservoir,	33,360.27
Pump well and culvert,	16,561.41
White homestead,	4,000.00
Peekham road,	512.00
Preliminary,	2,605.34
Engineering,	23,511.88
Salaries,	9,225.00
Incidentals,	7,843.18
Management and repairs,	290,332.73
Fountains and hydrants,	8,570.56
Work shop, North Water street,	5,598.75
Property, North Water street,	900,00
Land, State street,	350.00
New force main,	23,958.30
Inspection,	5,570.39
Temporary connection with Little Quittacas,	1,503.81

81,549,734.94

Payment of interest on debt, Water bonds paid, 6 per cent.,	\$48,388.14 20,000.00
Balance, Dec. 1, 1886,	\$1,618,123.08 26,105.81
	\$1,644,228.89

The receipts from the commencement of the works to this date have been as follows, viz.:

Appropriation by eity council,	\$1	,018,000.00
Received for water,		626,228.89
Deduct amount above stated,		,644,228.89 ,618,123.08
Balance at this date.		\$26,105.81
Outlay as above, Deduct from outlay:	\$1	,618,123.08
Amount paid for management and repairs, Interest paid, Bonds paid,	\$290,332.73 48,388.14	358,720.87
Actual cost of works to date,		,259,402.21
Total receipts for water,	;	\$626,228.89
Deduct from this: Amount paid for maintenance, debt and interest,		356,720.02
Water receipts applied to construction	n. <i>s</i>	\$267,508,02

The funds for the construction of the water works have been derived from the following named sources:

Investment of Sylvia Ann Howland educational bequest,	\$100,000.00
Sylvia Ann Howland water bequest,	100,000.00
Receipts from sale of bonds,	795,000.00
Net receipts for water applied to this account,	267,508.02
Appropriation for construction in 1885,	23,000.00
	\$1,285,508.02
Deduct balance, Dec. 1, 1886,	26,105.81
Net cost of works as above stated,	\$1,259,402.21

The water debt at this time is as follows:

Water bor	rds, 7 p	er cent.	\$160,000.00
66	6	44	360,000.00
6.6	5		100,000.00
66	4	44	100,000.00
Sylvia An	n How	and bequest for education	nal purposes, '
6 per ce			100,000.00

There are to be paid in 1887, on account of water bonds and interest, the following named sums:

Principal,	\$30,000.00
Interest on bonds,	41,800.00
Interest on educational fund,	6,000.00
	\$77,800.00

The appropriations by the city council in 1886 for this department were as follows:

Water debt, Interest on bonds, Interest on trust funds,	\$30,000.00 43,700.00 6,000.00
	\$79,700.00
Net expenditures by the water board, Principal and interest as above stated,	\$74,129.07 79,700.00
Actual amount expended,	\$153,829.07

There were 258 applications taken for water during the year for all purposes, as follows: Domestic and stores 11, stables 8, stores 3, city buildings 2, car houses 2, blacksmith shop 2, and for elevator, motor for manufactory, barber shop, fish market, jail, manufactory, saloon, garden, pastime, church, fire purpose, school building, ice house and gas works, I each.

Number of persons	using	water,	Dec.	1, 1	.885,
Since added,					

25,375 3,105

28,480

This includes those supplied at dwellings only.

A thorough inspection has been made during the year as heretofore, with the usual good results.

Very respectfully submitted.

JAMES H. HATHAWAY,

Water Registrar.

REPORT OF SUPERINTENDENT.

New Bebford Water Works, Superintendent's Office, December 1, 1886.

To the New Bedford Water Board:

Gentlemen: The superintendent's seventeenth annual report of the operations of this department for the year ending December 1, 1886, is herewith respectfully submitted.

A detailed statement of the rainfall in three localities appears in annexed table A, viz.: at the storing reservoir, Long Plain, at the pumping station and at the corner of Spring and County streets in this city, the last named being kindly supplied by Thomas R. Rodman, Esq.

On December 1, 1885, the surface of the water at the storing reservoir stood 45 inches below the flowage line. High water level was reached on February 12, and from this date until June a full reservoir was maintained. At the last named date the water commenced to settle and continued so to do until October 27, when the lowest level ever reached in the history of these works was recorded, viz.: 85 inches below high water, which point is 13 inches below the top arch of the conduit. The reservoir is now rapidly filling, the water level on this date being 22 inches below high water.

On October 11, the water in this reservoir having reached a point 68 inches below high water, it was appar-

ent that unless a heavy rainfall soon occurred, it would be necessary to resort to all available measures to avert a possible water famine.

On October 11 and 22, notices were issued calling the attention of consumers to the very low condition of the supply and urging the strictest economy in the use of the water during the emergency. On October 14, directions were given to clear the channel of the "dry swamp" ditch, so called. This ditch is the remains of a former channel through which water once passed from Little Quittacas pond into the Acushnet river, but which discontinued to flow many years ago because of the level of this pond having been reduced by connection made with Great Quittacas pond for the purpose of diverting the flow from the Acushnet into the Taunton river, and by raising the grade and culvert of the North Rochester road through which the brook formerly flowed.

Work was commenced on the morning of October 18 and was pushed with all possible despatch. This ditch was so completely filled that its clearance was a slow and difficult operation. The filling consisted largely of semiliquid deposits of leaves and debris, the removal of which was largely effected by bailing with buckets.

It was hoped that as this work progressed numerous springs would be opened and a supply secured sufficient for the daily requirements. But as this work progressed, although considerable water flowed through the brook as cleared, yet it was not enough to check the rapid falling of the level of the water in the storing reservoir. The situation grew more critical, and it was deemed best to excavate to a grade which would permit of a supply being drawn from Little Quittacas pond, should it be found necessary (as it afterward was) to extend the clearing out to that point.

Little Quittacas pond was opened by such clearing on the morning of Wednesday, October 27, and by noon there was an ample supply flowing into the storing reservoir. On the morning of the same day, the water level of the storing reservoir had reached the lowest point recorded for the year. At four o'clock the surface had risen one inch. The same day a storm commenced which continued at intervals for the next four days. The amount of rainfall was 4.32 inches. On Monday, November 1, the flow from Little Quittacas was discontinued, the reservoir having filled to a point 58 inches below high water.

While there is no question that the rapid rise of the water level was due more to the heavy rainfall than to the amount supplied from Little Quittacas, yet the latter, with what came from the other feeders, furnished more than was required for the daily needs of the consumers.

It was necessary to reconstruct the culverts at the point where the "dry swamp" ditch crossed the Dr. Braley and North Rochester roads. In considering the threatened disaster which was barely escaped, we are forced to the conclusion that our storing capacity is not adequate to the demands likely to be made upon it. This only confirms the statements of former reports. There can now be no question with respect to the advisability of promptly proceeding with the necessary steps to secure a permanent connection with either Long pond or Little Quittacas pond.

Whichever of these two sources may be selected, I should favor the construction of a closed conduit upon the line heretofore recommended, this conduit to extend from the source to the Spooner river, and to be placed at such grade that it may eventually be extended around the storing reservoir and connected with the present conduit leading to the city. Such a connection (viz.: from the source to the Spooner river) will provide the means of keeping the storing reservoir well filled during the summer months, and it is expected by so doing to present less favorable

conditions for the growth of the algæ which has been the cause of such annoyance in the past. If, however, this growth should then continue to flourish with the same disagreeable results, then without loss of time or money, the conduit can be continued from its proposed terminus at the Spooner river, southerly around the shores of the reservoir to the present conduit and thus a direct supply from the new source would be secured.

The grade at which it will be necessary to place either an open canal or closed conduit will not admit of a rapid flow of water. As compared with an open canal the cost of maintenance of a closed conduit would be little. It would also present less favorable conditions for vegetable growths and the water would be kept lower in temperature during the summer months.

The growth of algae made its annual appearance early in July and at the distributing reservoir was unusually prolific in its development. By the middle of July the disagreeable taste and odor caused by the decay of this plant appeared and continued to a greater or less extent for nearly a month. As compared with last year the trouble was of less duration.

It seems unnecessary at this time to enter upon any extended discussion relative to this phenomenon, as considerable space was devoted to the question in the report of last year. Let me, however, reiterate the following facts. This growth appears, more or less, every season in all surface waters. Its decay in some years is very offensive, while in other seasons it will not be noticed. Its presence does not indicate pollution, as it may be found in ponds whose purity is unquestioned. It seems to flourish more abundantly in shallow water of a warm temperature, while a low temperature and the exclusion of heat and light seem to be antagonistic to its development.

Although at times the taste of the Acushnet water may

not be as agreeable as that of numerous wells within the city limits, yet it is beyond question a much safer drinking water in every respect. Not the slightest evidence has yet been offered indicating that the Acushnet water contains anything of an injurious nature, such as would produce typhoid fever or diseases of any class, and our citizens should be very cautious in accepting any statements intended to prejudice its use for domestic purposes. The unprecedented freshet which followed the heavy rainfall of February 10-14, and which caused such extensive losses throughout the southern part of New England, seriously damaged the wasteway at the east end of the Wilson dam. The stone paving with which the raceway was lined quickly disappeared, leaving a wide and deep gully back to the plank apron upon which the walls of the wasteway rest. The water thereupon found its way beneath this planking and for a time it seemed as if the entire wasteway structure must succumb. As it was, the foundation on the down stream side badly settled and the masonry was left standing in a tumbling condition. It was found necessary to remove the whole structure and to entirely rebuild the same. No change has been made in the shape, but it now rests upon a concrete foundation in place of a plank and timber platform as formerly. This concrete is a foot or more in thickness and extends beneath the entire area of the apron as well as the side walls. Bedded upon this concrete rests granite paving one foot thick which forms the floor of the apron. Beneath that portion of the paving upon which the overfall stands the concrete is carried in layers to a thickness of two and a half feet. The raceway on the down stream side from the wasteway has been repaved and side walls are now being built.

Within the gate house at the Wilson dam, three new sluice gates have replaced those which have been used since the construction of the works. This was made necessary because of the extreme difficulty in operating the old gate. New screen and stop plank grooves of cast iron have been placed at the reservoir opening of this same gate house. The grooves formerly used were of wood and had decayed. To accomplish this work it was first necessary to construct and sink a plank and timber barrier in front of the opening, making all joints and openings water tight. The head of water against this barrier when the chamber was empty was ten feet and upward. The work of replacing the lower gate and the screen grooves was an exceedingly difficult and awkward operation, both on account of the limited space in which the work was done and the difficulty in removing all water from the bottom of the chamber. The amount of water needed for the daily supply was furnished each night by means of removing stop planks constructed in the barrier for that purpose.

To facilitate the moving of the screens and stop planks in the future, an outrigger has been placed through the brick wall of the gate house and extending over the screen grooves. Repairs of more or less importance have been made to the many culverts crossing the line of the conduit. A sluice gate has been placed at the outlet of the waste chamber just below the dam. The line of the right of way has been cleared of all underbrush and trees. The amount expended for these repairs to this date has been:

Repair t	to	wasteway, Wilson dam,	
Repair t	to	gate house, Wilson dam,	
Repair t	to	conduit,	

\$2,234,68
1,467.01
401.03

\$4,102.72

The extension of the pumping station has been fully completed and a considerable amount of work has been accomplished in placing the entire pumping plant in a state of most thorough repair.

In both engine rooms birch floors have been placed, and

the walls have been decorated in harmonious colors. Both the McAlpine and older Worthington engines, which have been altered and repaired as mentioned later in this report, have been tastefully painted.

The north half of what was formerly used for a wood room has been partitioned off and converted into a repair shop. A machine lathe and all other necessary tools have been placed therein. A ten ton platform scale has been placed in the roadway just south of the boiler house upon which the weight of each load of coal delivered is determined.

The steam heating apparatus of the building has been remodeled and is now connected with an independent boiler of about five horse power capacity. The steam pipe on its passage from the boilers to supply engine No. 3 passes through and is suspended to the west and north walls of the old engine room. In order that this pipe may be accessible for frequent inspections a gallery has been constructed in this room just beneath the level of said pipe.

The work of enlarging the pumping capacity is now fully completed. The following statement exhibits the cost of this work.

REMODELING THE MODE OF SUPPLYING THE PUMPS.

Extension of conduit to pump wells, including repairs to old culvert leading from receiving reservoir to old pump well, previous to Dec. 1, 1885, \$19,083.08 New gate house over conduit, previous to Dec. 1, 1885, 2,743.23 Repairs to effluent gate house, previous to Dec. 1, 1885, 1,400.80 Remodeling drains, previous to Dec. 1. 1885, 2,767.43 \$25,994.43 Less value of stock on hand, 1,230.39 \$24,764.15

PUMPING ENGINE HOUSE ADDITION.

Engine house extension, including new

pump wells, previous to Dec. 1, 1885, \$15,075.35

During 1886, 1,584.11 \$16,659.46

Repairs to old engines and enginehouse, made necessary by new exten-

sion, previous to Dec. 1, 1885, \$1,206.74

During 1886, 3,648.74 4,855.48 \$21,514.94

NEW FORCE MAIN.

Force main with connections previous

to Dec. 1, 1885, \$23,944.53

During 1886, 13.77 \$23,958.30

Weir tank at distributing reservoir,

\$2,804.37 previous to Dec. 1, 1885,

During 1886, 49.23 2,853.60

\$26,811.90

568.25

Less value of stock on hand,

2,674.45 24,137.45

979.55

NEW HIGH DUTY WORTHINGTON PUMPING ENGINE.

Amount paid H. R. Worthington, as

per contract, previous to Dec. 1, 1885, \$16,875.00

During 1886, 5,625.00 \$22,500.00

Amount paid H. R. Worthington extra,

1886,

Inspection previous to Dec 1, 1885, 118,50

Foundation engine previous to Dec. 1,

\$1,208,35 1885,

During 1886,-37.61 1,245.96

Boiler foundation and setting, previous

100.76 to Dec. 1, 1885,

Drain to delivery pipe boilers, during

45.00 .

Water level gauge, drip pans, etc., dur-

82.93 24,661.45 ing 1886,

GROUNDS AROUND PUMPING STATION.

Grading, draining and otherwise im-

proving, previous to Dec. 1, 1885, \$921.79 57.76 During 1886,

Total,

\$96,057.54

A description of the new "high duty" Worthington engine is included in the report of the official trial which may be found in the latter part of this report. This engine has to this date worked in a very reliable and satisfactory manner, and everything would seem to indicate that it will continue to render economical and efficient service for many years to come.

In the last report, the McAlpine engine was stated to be in a very depreciated condition. The working parts of both pumps were so thoroughly worn as to render them totally unfit for future service. Several other parts of the engine also needed renewing. In this connection your superintendent advanced the opinion that the engine as it then stood was altogether too valuable to be entirely discarded, and that it should be placed in thorough repair.

By your direction a careful inspection of this engine was made by Mr. A. A. Wilson, mechanical engineer, who acted as superintendent for the contractors at the time of its construction.

As the result of this examination, Mr. Wilson made a careful statement relative to the needed repairs and suggested radical alterations in the pumps. These changes if made would place the engine in equally as good, if not better, condition than when it was first set into operation.

A contract for the sum of \$6500 was executed with N. F. Palmer, Jr., & Co., of the Quintard Iron Works of New York, on February 3, to do all the work covered by specifications drawn from the details of Mr. Wilson's report.

In the prosecution of this work it was found necessary to remove all parts of the valve motion and link connection throughout, and many of the parts had to be entirely renewed. The dash pots were rebored and fitted with new plungers. A new main shaft pillow block was provided, as were also new bottom boxes for both the beam and outer shaft bearings. As had been stated in former reports, the

flange adjoining the bed plate at the head of the east pump was cracked off at one side and the pump had been forced outward, thus destroying its alignment; also a bad crack existed in the strainer casting beneath this pump. This pump was forced to its original position and properly secured. The strainer casting has been reinforced by strong holding down bolts attached at a point above the crack. As the continual pounding of the butterfly form of foot, plunger, and delivery valves formerly in use had no doubt resulted, to a great measure, in the deteriorated condition of this engine, it was decided to replace them with a foot and a plunger valve of entirely new design. The delivery valve has been discarded and the pumps have been made double acting in their discharge by the addition of plungers twenty inches in diameter placed just above the plunger valve. Thus half of the work has been transferred to the down stroke of the pump. Both the plunger and foot valve are similar, and each consists of five separate annular valves working in parallel horizontal planes one above the other. Each of these sections has a different diameter, varying from the larger, which is at the bottom, to the smaller at the top, so that the whole valve presents the form of a truncated cone. Each individual valve is a rubber \{\} inch thick seating upon a brass grating with openings 23 inches by 3 of an inch. There are 300 of these openings in each cage of valves. The cracks in the working beam were pronounced to be mainly due to shrinkage and a small hole has been drilled at the utmost limit of each, to prevent their further extension.

Formerly fourteen revolutions per minute was about the maximum rate of speed that this engine could be satisfactorily operated. The adoption of the new pump valves allow the speed to be carried as high as eighteen revolutions per minute and at that rate they operate with very little jar or concussion, being far less than was experienced with the

old form of valves at the former maximum speed. For a working speed it has been found convenient to adopt a rate of about fifteen revolutions per minute, which causes an actual discharge over the weir at the distributing reservoir at the rate of 6,300,000 gallons per twenty-four hours. The slip of the pumps is $2\frac{6.6}{10.0}$ per cent.

The work of this contract has been most faithfully accomplished and the engine as it now stands not only operates with an increased capacity in a manner far more satisfactory than heretofore, but by inspecting the table showing the performance it will be seen that the duty reaches a higher figure than that shown by previous statements.

The old Worthington engine has received a most thorough overhauling. Every needed repair has received careful attention. An entire new set of valves has been placed within the pumps. All the working parts have been taken apart and renewed where necessary. The slide valves have been refaced and all the steam valves reground. All joints have been repacked. The air pump has received a new set of valves. The steam cylinders have been covered with the Chalmers Spence Co. patent "air space" covering. The lagging over the steam end has been renewed. This engine is now in a condition fully as good as when new.

Two years ago it was a recognized fact that our pumping facilities were the weakest part of our entire works. Today finds it the most reliable feature in our system, and fully equal for any emergency that may arise.

The contract for coal was made with Temple S. Corson at \$5.00 per gross ton.

The cost of pumping the past year has been as follows:

1st. Figured on pumping station expenses:	
Cost of fuel used,	\$4,872.00
Salaries, engineers, firemen, watch-	
men,	3,606.54
Cost of oil, waste, packing and	
other supplies,	648.61
Gas and insurance,	343.19
Repairs on machinery and boilers,	9,232.06
Total numerica expense	#10 700 40
* * * * * * * * * * * * * * * * * * * *	\$18,702.40
Raising water into reservoir, per	da a oa
million gallons,	\$17.21
Raising water per million gallons,	39.457
one foot high,	$.13\frac{457}{1000}$ cents
2d. Figured on total maintenance, viz.,	\$86,014.89
Raising water into reservoir, per	
million gallons,	\$79.15
Raising water, per million gallons,	
one foot high,	$.61_{1000}^{882}$ cents

It will be observed that the cost of pumping is largely in excess of former statements. This is owing to the item of expense incurred in repairing and rebuilding the old pumping machinery, viz.: \$9,232.06. If this unusual expense could be divided over a space of ten years, and only one tenth charged to the account of this year, then the pumping station expenses would have been \$10,393.54 and upon this basis the cost of pumping would have been:

Raising water in	o reservoir,	per million gall	ons, \$9.56	
Raising water per	million galle	ons, one foot hig	h, $.07\frac{47}{10}$	ents cents

The distributing mains have been increased 11,448 feet and 1940 feet of pipe previously laid has been removed. The total mileage of main pipe now in use is $52\frac{06.6.5}{10000}$ miles. Another section of the new twenty inch supply main has been completed, viz.: in Pleasant street from Kempton to Pearl. Where this main passed through the large reser-

voir in Pleasant street north of Maxfield, it is supported on six brick piers. The ground plan of this reservoir roughly approximates to the shape of the figure eight. Its entire length is 47 feet and its widths are as follows, viz.: north half 15 feet, south half 19 feet, middle 10 feet. The bottom is about 20 feet below the ground surface. The roof is of split stone, and as many parts were found to be in a weak condition, it has been strengthened by placing beneath it a longitudinal double row of railroad iron supported by iron posts.

The difficulty of maintaining a satisfactory supply to families located on the highest elevation in the summer season, during those hours when the manufactories are drawing heavily, increases with each new year. The laying of the new supply main is intended to obviate this difficulty.

Two important sections of this supply main remain incomplete, viz.: a twenty inch pipe in State street from Linden south diagonally across the common, to connect with the end of the pipe now laid in Pleasant street at Pearl, and a sixteen inch pipe in Durfee, Ashland and Linden streets, connecting the end of the twenty-four inch pipe in Mount Pleasant street with the twenty inch pipe at the corner of State and Linden streets.

At the gate house of the distributing reservoir a connection should be made between the old force main and the screen chamber which, being properly gated, will allow the use of the old force main at discretion, either as a force or distributing main.

In view of the pressing need of this improvement in the pipe system, I would recommend that the above described work be included in the operations of the coming year. During the past year there have been eight leaks is the main pipe. The location and cause is stated in the following table.

DATE. SIZE.		SIZE.	LOCATION.	CAUSE.	COST.	
Jan.	21	4	inch.	First street, south of Howland.	Joint started.	\$10.25
June	7	6	44	County street, south of Cove.	66 66 '	1.75
July	17	8	44	Second st., north of Potomska.	46 , 66	3.12
66	17	16			66 66	5.25
Sept.	17			Union st., east of Acushnet ave.	Pick holes.	6.00
66	27	8	66	Hawthorn st., near Tremont.		2.50
66	27	8	66		66 66	3.25
et.	13	6	6.6	Kempton st., corner Cypress.	Pick hole.	2.00

Thirty new hydrants have been set and nine old hydrants have been removed. Total number now in use 388.

Nineteen additional watering cart hydrants have been placed in localities named below, at an expense of \$853.23, an average of \$44.90 per hydrant.

These have been placed for the convenience of the highway department, that they may obtain such an amount of water as may be needed for their operations without recourse to the ordinary fire hydrant.

- 1. Coffin avenue, south side, 7 feet east of Bowditch.
- 2. Cedar Grove street, south side, 18 feet west of Acushnet avenue.
- 3. Mount Vernon street, south side, 14 feet west of Mount Pleasant.
- 4. Linden street, south side, 30 feet west of Purchase.
- 5. Reynolds street, west side, 8 feet north of Linden.
- 6. Robeson street, south side, 38 feet west of Cedar.
- 7. Locust street, south side, 25 feet west of County.
- 8. Smith street, south side, 53 feet east of Park.
- 9. Summer street, west side, 4 feet north of Hillman.
- 10. Kempton street, south side, 102 feet east of Newton.
- 11. Kempton street, south side, 16 feet east of Rockdale avenue.
- 12. Court street, north side, 15 feet east of Ash.
- 13. First street, west side, 118 feet south of School.
- 14. Allen street, north side, 154 feet east of Page.
- 15. First street, west side, 28 feet south of Grinnell.
- 16. Dartmouth street, east side, 13 feet south of Oak.
- 17. Thompson street, south side, 72 feet west of Warwick.
- 18. Water street, west side, 6 feet south of Blackmer.
- 19. Middle Point Road, south side, 58 feet east of French avenue.

Thirty-six new stop gates have been set and two formerly in use have been removed. Total number now in use, 509. Eight water gates have been set, making the total number in use 51. Ten private stop gates have been set, making the total number now in use 106. Two hundred and seventy-two feet of small size distribution pipe (less than four inch) has been laid. Total length now in use, $1\frac{175}{1000}$ miles.

Twenty-one small size stop gates (less than four inch) have been laid, and one previously laid has been removed. Total now in use, 57.

The total number of motors now in use is 26.

The total number of meters now in use is 82.

Two hundred and sixty service pipes have been added, and three extensions made to pipes previously laid. Total number of service pipes now in use, 5225.

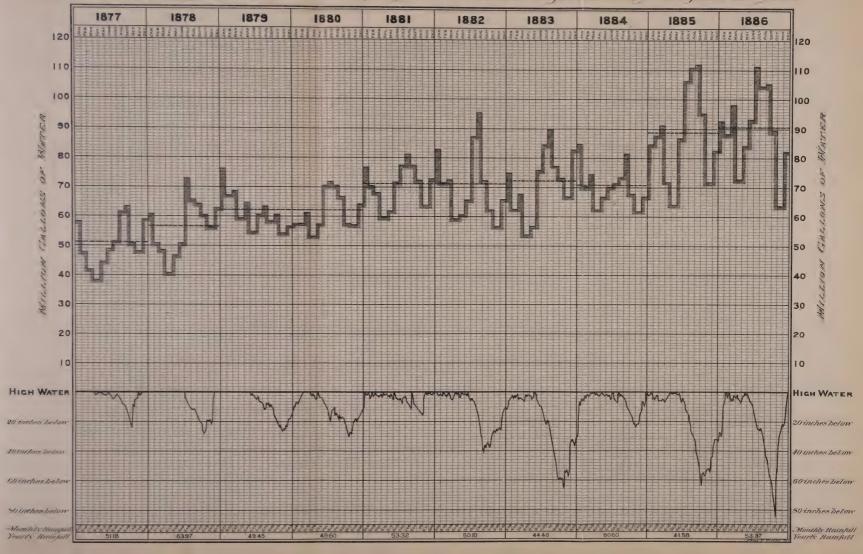
Three hundred and thirty service taps have been cleaned as follows, viz.: eels 186, rust 131, trouble inside 11, frozen 2.

Quite an annoyance has been experienced since the first of November by eels being caught at the taps of service pipes on the lowest levels along the water front. Of the number mentioned above, 175 taps were cleaned from this cause alone during the month of November. As the utmost pains has always been taken regarding the screens of the different reservoirs, it is more than probable that they passed through the meshes of the screens when they were very small, and have since grown to be quite sizeable.

Upon the annexed diagram is indicated the monthly consumption, the fluctuation of the water level at the storing reservoir, and the rainfall of the past ten years.

NEW BEDFORD WATER WORKS

THAGRANI showing the consumption and height of water at the Storing Reservoir, for the past ten years.





The following tables present interesting statements regarding the consumption, and a comparison is made with the record of other cities and towns.

MONTHLY CONSUMPTION AND RECORD OF PRESSURE AT THE CITY HALL.

1886.	Monthly Consump-	Daily Average.	Lbs.	pressu 10 A. M		Lbs. pressure at Midnight.		
Month.	Gallons.	Gallons.	Max.	Min.	Av.	Max.	Min.	Av.
January,	92,668,143	2,989,295	33	29	31	36	33	35
February,	88,271,482	3,152,553	38	27	32	40	31	35
March,	98,176,354	3,166,979	38	29	33	39	31	35
April,	72,959,536	2,431,984	34	31	32	36	34	35
May,	84,151,286	2,714,558	33	29	31	36	33	35
June,	93,266,644	3,108,888	34	29	31	36	29	35
July,	111,089,973	3,583,548	32	25	29	35	29	34
August,	104,660,892	3,376,153	33	28	30	37	29	34
September,	105,399,575	3,513,319	32	27	30	35	33	35
October,	89,634,540	2,891,437	34	29	31	35	33	35
November,	63,804,095	2,126,803	33	31	32	35	35	35
December,	82,242,896	2,652,997	34	29	32	35	32	35
Averages,	90,527,118	2,976,234	34	28	31	36	. 32	35

COMPARISON OF THE CONSUMPTION OF THE YEAR 1886 WITH THE RECORD OF THE FIVE PREVIOUS YEARS.

Estimated Population.	Estimated No. of consumers.	Total No. of gallons consumed.	Average dally consumption.	No. of taps.	Gals, per day to each inhabitant.	Gals, per day to each consumer.	Gals. per day to each tap.
1881, 27,000	19,044	844,249,647	2,213,012	3,925	86	122	589
1882, +28,500	20,424	859,119,622	2,326,352	4,203	82	114	553
1883, 30,000	22,249	849,059,700	2,326,191	4,465	78	105	521
1884, 33,000	23,749	867,815,595	2,371,080	4,691	72	100	506
1885, 33,700	25,375	1,049,801,050	2,876,167	4,965	85	113	579
1886, 34,500	28,480	1,086,534,615	2,976,807	5,225	86	104	569

COMPARATIVE STATISTICS, RELATIVE TO THE AMOUNT OF WATER CONSUMED IN VARIOUS NEW ENGLAND CITIES AND TOWNS DURING THE YEAR 1885.

City.	Estimated population.	Estimated population on line of pipe.	Estimated population supplied.	Total number of gallons consumed.	Average daily consumption.	Number of taps. Gals, perday to each inhabitant.	Gals, per day to each consumer. Gals, per day to each tap.
Providence,	120,000			1,650,964,062	4,730,556	11,989 39	394
Worcester,	69,000	59,000	51,808	1,259,250,000	3,450,000	7,191 50	66 480
Lowell,	64,051			1,299,766,280	3,561,000	6,913 55	515
Fall River,	56,863		48,200	543,170,104	1,488,137	3,708 26	31 401
Springfield,	38,000	33,000	29,000	1,095,000,000	3,000,000	4,237,79	104 707
New Bedford,	33,700	25,373	23,500	1,049,801,050	2,876,167	4,965 86	113 579
Pawtucket,	1 25,000	*40,000	30,000	†770,945,824	2,308,221	4,165 58	76 555
Taunton,	23,674	18,000	16,000	246,692,770	675,870	2,523 28	42 267
Newton,	20,000	17,000	16,300	224,500,000	615,000	3,134 31	38 211
Woonsocket,	19,000	16,000	5,990	53,884,669	147,629	425 10	25 340
Burlington,	13,357	13,000	12,700	209,026,325	572,674	2,145 43	45 267
New London,	11,500	10,500	8,529	360,000,000	993,000	1,593,86	116 623
Ç ∫ Cochituate,	353,500		345,000	9,346,633,700	25,607,200	51,810 72	494
Cochituate, Mystic,	99,000		98,000	2,459,133,500	6,737,350	15,928 68	423

^{*}Includes other towns outside of Pawtucket.

[†]For eleven months.

In considering the amount daily supplied per capita it will be observed that New Bedford stands high upon the list. It would naturally be expected that the rate of our city would far surpass such a place as Newton, where the supply is almost wholly devoted to domestic purposes, but it would seem as if our requirements ought not to exceed such places as Providence or Fall River. In both of these cities as well as our own, the manufacturing interests form an important factor. Assuming a daily supply of 400 gallons per tap to be an amount sufficient for our needs, and with our present number of services, our daily consumption would show an average of about 2,100,000 gallons, an amount 876,000 gallons less than the average daily consumption of last year. The success of Providence, Fall River and Taunton in maintaining a low rate of consumption is due to the application of a large number of meters.

There can be no doubt but that a discriminate application of meters in our community would show the same result. While our inspector, Mr. Richardson, has been exceedingly diligent and has done good service in checking waste whenever found, it must be remembered that it is impossible for him to be everywhere at once. Often when repairs are made, owing to the inferior quality of the fixtures, new leaks will appear within a very few days. The application of meters in such cases would greatly supplement the work of the inspector and would do more to educate careless takers to an economical use of water than by any other means.

In this connection there is another important matter

which should receive your consideration. I refer to the pressing need of the adoption of an ordinance to regulate the manner in which plumbing shall be executed upon the premises of the takers, and to further provide that such work shall only be done by competent plumbers licensed by the Water Board.

Unfortunately quite an amount of cheap contract work has been connected with our supply pipes during late years. Such work is constantly developing leaks of more or less magnitude, and causes a series of recurring annoyances which ought to be prevented in the future. Let me urge the importance of this matter and the necessity of the adoption of such measures as will, upon the average, secure a much better grade of work in the future than has been the practice in the past.

Respectfully submitted.

ROBERT C. P. COGGESHALL,

Superintendent.

TABLE A.

Showing Rainfall at Storing Reservoir for 1886.

Day.	Jan.	Feb.	Mch.	April.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1,				.40					.08	.01		.02
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23,								.29				
3, 4.		1.02		.05		.11						
$\tilde{5},$	1.26	1102			.05							1.65
6,	.13			.82 .94	.08	.10		1.18			2.05	0~
8.				.94	.90			.65			.34	.65
9,	.41		.14		.91			****				
10,		7 0"			7.0	.61	0.5		.39			
11,		$\frac{1.05}{3.25}$.08		.13 .17		.05)	
13,		1.43	.11	.05	.11	.15			.54		3.94	.28
14,		.15						.65		00		
15,		.13		Ì	.94	İ	.11	.27	.05	.09		
17,	.05				*UI		.18	.05	600		.06	
18,						.01				.25		.36 .68
19,	.60		.42								.67	.68
$\frac{20}{21}$.			$\frac{.42}{2.34}$									
22,	.32		.03									
$\frac{23}{24}$.05			90			.90		.65	
$\frac{24}{25}$.15			.18	.73	.28 .12			.03		.00	1.62
26.	.83	1.40		• • • • • • • • • • • • • • • • • • • •	.,,	***	.63					
27, 28,		.43	.60		0.0		.47		44	.94		.07
28,	1.76				.03				.11	.78		
29, 30, 31,	.20		.47				1.32	.41	.05	.62 .15	.35	
31,	.41		.47 .63		.05		.10			1.74		2.14
	6.20	8.86	4.87	2.44	3.99	1.38	2.87	3.50	2.15	4.58	$\frac{-}{5.06}$	7.47
	0.20	0,40			3.00			0.00		2.00	0.00	

Total fall for the year 53.37 inches.

TABLE A.—Continued.

Showing Rainfall at the Pumping Station for 1886.

Day.	Jan.	Feb.	Mch.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
		},,,,,		.17		.14		.26				.21
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 30, 31,	1.02	₹1.14		$\bigg\}_{1.65}$	$\left. \begin{array}{c} .03 \\ .07 \\ \left. \right. \end{array} \right.$.11		.75 .45			1.07	1.25 1.47
9, 10,	1.48		.11) 1.02	.65	.03		.36		.03	
11, 12, 13, 14,		4.80	.08	.04	.03	$\left. ight\}.23$.03	} .28	.42	.02	1.08 .02	.36
15, 16, 17,						.03	.03 .02 .15	.35	.03	.14	.02	.90
18, 19, 20, 21.	.64	.37	$\frac{.54}{2.08}$.02		.05	.02		.03	.29	.60
22, 23, 24,	30		2.00	.15		}			}1.19		.46	.02
25, 26, 27,	$\left.\right\} .80$.24	.60	.04	.05	.05 .03	.70 .76	.03	.02	${}^{1.87}_{1.57}$.65	1.52 .06
29, 30, 31,	3.73		1.24		.06		$\left. \begin{array}{c} 1.95 \\ 1.12 \end{array} \right.$	$\left. \begin{array}{c} 104 \\ 0.53 \\ 0.03 \end{array} \right.$.25 .02	$\begin{array}{c c} .57 \\ .57 \\ 1.25 \\ .02 \end{array}$.23
	6.47	7.69	$\frac{1}{4.76}$	2.17	3.99	1.98	2.83		2.31	4.47	4.19	6.67

Total fall for the year 49.82 inches.

TABLE A .- Concluded.

Showing Rainfall at New Bedford, as registered by T. R. Rodman, for 1886.

									-			
Day.	Jan.	Feb.	Mch.	April.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,		}	.01	.03	0.5	.16		.46				.26
4, 5, 6,	.96	.05		$\left. \begin{array}{c} .04 \\ 1.49 \end{array} \right.$.05	.15		.72			$\left. ight\}_{1.22}$	}1.40
. 8, 9, 10,	1.62		.12		$\left.\begin{array}{c} \\ 1.92 \\ .32 \end{array}\right.$	}.58	.02	39.39	.27		.05	1.08
13, 14,		4.51	} .14	} .10	.52		.15	$\left. ight\}.34$.31	.01	$\}$ 1.10	.30 .05
15, 16, 17, 18,					.79		.15 .03 .07 .02	.34	.04	.30	} .27	.50
19,	.48	.32 .03 .02	$\left. ight\}_{2.85}$.11					.56
22, 23, 24, 25,	.30	.02		} .21	}1.04	}.82 .37		.10	1.33		.44	1.55 .05
20, 21, 22, 23, 24, 25, 26, 27, 28, 30,	$\left.\right. \begin{array}{c} .94 \\ 1.69 \end{array}$	1.30	} .60	.05	.07	.37	$\left. \right\}$ 1.34)	.22		.66	.05
30, 31,	.15		.62 .65		.11		3.88	∫ .55 .05		4.18		1.10
	6.74	6.97	4.99	2.11	4.40	2.08	2.74	2.95	2.17	4.49	3.74	6.92

Total fall for the year 50.30 inches.

TABLE B.

STATEMENT OF WORK DONE BY PUMPING ENGINE NO. I (MCALPINE) FOR THE YEAR ENDING DECEMBER I, 1886.

-			DUTY.*		56,898,706	64,432,965	58,380,305	810 5018
T	ant II	gioi u	Average dutraled one for the following of Calculated one used for all deductions.	LBS.	$16,359,000 \ 394.19 \ 511.26 \ 129.7 \ 42,503,537 \ 56,898,706$	46.881,920	73,158,022 403.79 528.95 129.5 44,011,422 58,380,305	810 501 690 60 110 61 60 01 170 60 60 180 60 60 60 60 60 60 60 60 60 60 60 60 60
1	wance n.	suctions	Av. dynamic l pump in feet, i for friction in	FEET.	129.7	128.7 135.0	129.5	0 07 1
			Number of gr 100 feet per po for tota	GALS.	511.26		528.95	1,000
	nmped r total	lonspr goal fo fi.	Number of gal	GALS.	394.19	438.38	403.79	100
411	snol wolls qile	of gall, tonth, tot ebr	Total number pumped per nanger nange being na	GALS.	16,359,000	51,685,256 5,113,766	73,158,022	
			Total fuel.	LBS.	41,633	118,333	173,466	
		COAL.	Total.	LBS.	41,500	86,100 117,900 10,700 13,500	,400 23,600 127,900 172,900 173,466	
	EL.		Pumping.	LBS.	31,100	86,100 10,700	127,900	
	FUE		Ashes and clinkers.	LBS.	5,600	1,900	23,600	
			Raising steam and banking.	LBS.	4,800	15,700 16, 900 1,	12	
		1800=	lbs. of wood =	LBS.	133	433	566	
	-njo.	.amu.	erage number	ΛV	13.12	13.44	12.90	
-	-nje	of reve	Total number of read read read read read read read read	REV.	57,000 13.	180,088-13.44 17,818,12.12	254,906	
	рег	emit ;	gniqmnq lstoT ltaom	н. м.	72 25	223 20 24 30	30 320 15 254,906 12.90	
	*2	Buidun	mber of days pu	mN	10	22 00	30	
			MONTHS.		er,	January, February, March, April, May,	Totals & Av.	

1,200 1,200 8,100 10,500 10,504 4,389,140 418,0158647 140,5 48,91,8241637 140,500 9,100 6,610 6,510 6,	Totals & Av. 59 707 05 638,707 14,75 1,107 63,300 41,300 263,820 368,420 369,527 187,141,151 489,63 648,53 131.7 53,057,612 75,741,734	a factor.
1,200 1,200 8,100 10,500 10,500 10,500 11,11,10,500 9,100 46,900 66,614 343 7,500 6,200 35,600 49,300 19,443 533 21,600 14,200 102,080 137,880 138,413 117,18,300 8,700 58,640 85,640 85,757 4,200 1,900 12,500 18,600 18,600	1,107 63,300 41,300 263,820 368,420 369,527 18	*In estimating this duty, only the amount of combustible coal used while pumping was taken as a factor.
June, F. 2 18 30 14,980.13.50 August, F. 7 197 50 88.801.15.13 September, P. 10 12 45 146,310.15.46 November, F. 1 34 40 30.021.14.43	Totals & Av. 59 707 05 638,707 14,75	*In estimating this duty, only the amount of co

TABLE B.—Continued.

Statement of work done by Pumping Engine No. 2 (Worthington) for the year ending December 1, 1886.

		DUTY.*	And the second second	51,460,757 51,212,246 56,505,687 53,351,075 56,231,038 54,856,871 57,404,431 57,404,431 57,936,466 63,917,380 41,924,852 41,924,852	3,758,269
[aut [ot hig coal. n tota	raised one to 100 pounds of Calculated or used, for all deduction	LBS.	39, 255, 381 5 40, 902, 089 5 41, 119, 092 5 41, 508, 339 5 40, 845, 494 5 40, 845, 494 5 87, 198, 198 5 88, 302, 497 5 88, 302, 497 5 88, 301, 473 4 87, 014, 734 4	$3.85 \pm 117.200150,100849,4001,116,7001,120,55 \pm 438,707,088$ 1370.86 ± 67.55 $126.139,077,423$ $53,758,269$
wance n.	olla on oitous	Av. dynamic l pump in feet, i for friction in Average duty	FEET.	126.0 3 125.6 4 125.2 4 125.2 4 125.2 4 126.0 2 126.0 2 126.0 2	126.13
f coal	ound o	Number of ga	GALS.	451.65 531.85 531.85 531.85 502.01 492.36 492.01 459.75 414.24 447.85 351.00	67.55
mped r total	of Igo	Isg to redmuN o to banoq req soc	GALS.	374.33 424.80 424.80 386.64 400.97 2389.32 400.97 389.32 389.33 363.73 4323.88 4323.88	370.86 4
-Wolls	(qjuoi	Totan nunber Total nunbed per m Sance beiter	GALS.	63,711,360 74,899,152 74,679,408 39,050,640 57,299,040 51,297,649 51,268,176 11,38,368 1,38,368 1,989,536 (62,864	138,707,088
		Total fuel.	LBS.	170.551 191,817 176,744 176,744 143,105 139,147 132,108 54,416 5,550 2,250	1,120,554
		.ГезоТ	LBS.	170.200 191.200 175.800 175.800 142.900 142.900 131.500 54.300 57.500	1,116,700
UEL.	JOAL.	Pumping.	LBS.	138,100 153,200 177,100 106,400 104,300 37,900 1,200 1,300 1,300	849,400
¥.	5	Ashes and clinkers.	LBS.	23,000 24,800 13,400 113,800 1	150,100
		Raising steam and banking.	LBS.	17,100 13,200 13,200 10,100 17,100 17,100 15,800 1,200 600 600	117,200
	[BOD=	lbs. of wood == boov solution in bounds.	LBS.	851 944 944 116 205 747 608 116 50 50	3,854
rs per	.9	retage number dunim		18.08 18.18.08 18.18.08 18.18.19 18.18.19 18.18.19 18.18.19 18.18.19 18.10 18.	18.29
s ber		Total number	STROKES.	442,440] 520,133,1 520,133,1 57,185 37,105 37,067 37,067 37,159 8,322 13,469 13,469 13,469 13,469	3.046.577 18.29
-	p.	Total pung ledoT Janom	. M.	407 45 476 25 476 25 476 25 477 20 3314 45 3317 45 3317 45 3304 30 113 50 1 5 30 4 00 4 00	30 30
		nber of days pr	m _N		87 268
		MONTHS.		December 1885 January, 1886 February, March, April, May, June, July, September, October, November,	Trotals and Av. 187 2680 30

*In estimating this duty, only the amount of combustible coal used while pumping was taken as a factor.

TABLE B.—Concluded.

STATEMENT OF WORK DONE BY PUMPING ENGINE NO. 3 (WORTHINGTON HIGH DUTY) FOR THE YEAR ENDING DECEMBER 1, 1886.

		DUTY.*		102,012,101 91,789,645 87,422,869 86,036,896 85,589,795 111,759,036	94,101,724
spune y per fuel on 's	t high oal.	Average duty raised one foo 100 pounds of Calculated on used for all productions,	LBS.	61,725,586 69,622,992 69,035,974 67,110,432 70,061,893 66,177,436	809.95 128.0 67,289,052
sinst sons:	ead ag silon suction	Av. dynamic h pump in feet, no for friction in s	127.9 127.0 127.2 127.9 129.4	128.0	
sised f coal	nug os nug os Jour	Number of ga 100 feet per po for tota	746.80 839.31 829.52 807.01 841.29 795.76	809.05	
tetot:	ng suo oai too l,	Number of gall of the pound of cose	GALS.	583.89 657.77 652.14 630.97 650.15 623.15	633.01
 sno Molfi slip.	of gall, s onth, s de for	Total number of pumped per magnesing man	GALS.	35,533,040 60,955,382 77,198,614 32,747,200 44,730,192 54,395,078	1,800'73,000 56,550 350,343 479,893 481,693 305,559,506 633.01
		Total fuel.	LBS.	61,405 93,170 118,628 52,050 68,900 87,540	181,693 3
		Total.	LBS.	60,855 92,670 118,378 51,900 68,800 87,290	£79,893 ±
EL.	AL.	·Buiqmn4	LBS.	37,155 70,670 93,678 40,600 56,400 51,840	350,343
FU	00	Ashes and clinkers.	LBS.	7,700 15,100 5,300 9,050	56,550
		Raising steam and banking.	LBS.	16,000 9,600 6,000 6,000 8,400 26,400	73,000
	IgoD=	oow to .edl =	LBS.	150 150 100 100 100 100 100	1,800
okes	.931	erage number per mini	ΔV	18.68 18.85 18.30 16.50 17.17	17.96
rsq se	stroke th.	rədmun lstoT nom	STROKES.	183,160 314,203 397,931 168,800 230,568 280,387	101 1462 56 1,575,049[17.96]
	.111.	пош	W.	25. 25. 10. 10. 10. 10.	90
aed a	emit g	aigmug letoT aom	H	163 277 362 153 232 272	1462
.81	ıidun	mber of days r	258558	101	
		MONTHS.	June, July, August, September, October, November,	Totals & AV.	

Amount of water pumped previous to trial in June, 82,064,614.

*In estimating this duty, only the amount of combustible coal used while pumping was taken as a factor.

TABLE C.

METERS.

LOCATION.	PATTERN.	SIZE.
Henry H. Allen, Sixth street,	Crown.	1 inch
John S. Allen, State street,	Ball & Fitts rotary.	5 66
Same,	Ball & Fitts rotary.	3 66
Mrs. A. M. Blackler, 111 Summer street,	Ball & Fitts rotary.	15.00 30.4430.4430.000.000.000.000.000.000.000
Albion T. Brownell, Madison and Fifth sts.,	Crown.	5 66
S. C. Caldwell, Pleasant and Hazard sts.,	Ball & Fitts rotary.	5 66
Same,	Equitable.	5 66
Central wharf,	Ball & Fitts.	2 66
Nathan Chase, County street,	Crown.	3 66
City wharf,	Ball & Fitts.	3 "
E. J. Collamore, 22 Parker street,	Crown.	3 66
Commercial wharf,	Ball & Fitts rotary.	3 66
Abner T. Davis, Fifth street,	Ball & Fitts rotary.	5 44
Benjamin Dawson, Purchase and Hazard	Buil & Thus Toury.	8
streets.	Crown.	11 46
A. Dematty, Purchase and Kempton sts.,	Empire.	1 66
James Doull, Purchase street,	Crown.	
James Doull, 82 Chestnut street,	Crown.	5) 66 66 66 66 66 66 66 66 66 66 66 66 66
James Doull, Thompson and Warwick sts.,	Crown.	5 66
James Doull, Hicks street,		8 5
	Crown.	3 44
James Dowden, Mill street,	Ball & Fitts rotary.	4 "
David Duff & Son, Central wharf,	Crown.	
Geo. M. Eddy & Co., Union street,	Ball & Fitts rotary.	10
Electric Light Co., Middle street,	Ball & Fitts rotary.	$\begin{vmatrix} 2 & \cdots \\ 2 & \cdots \end{vmatrix}$
Electric Light Co., School street,	Ball & Fitts rotary.	
Giles S. Fales, Water and Elm streets,	Ball & Fitts rotary.	2 "
Simeon Folsom, Middle and Purchase sts.,	Ball & Fitts rotary.	
T. J. Gifford, Hillman street,	Crown.	34
Grinnnell Mill, Kilburn street,	Ball & Fitts rotary.	4 "
James Groat, Purchase street,	Ball & Fitts rotary.	5 66
S. Hall, Franklin street,	Crown.	3 (6
Henry F. Hammond, Mill street,	Crown.	3 66
Haskell & Tripp, William street,	Ball & Fitts rotary.	2 "
Same,	Crown.	3/4/4 · · · · · · · · · · · · · · · · · ·
C. M. Haskell, Acushnet avenue,	Ball & Fitts rotary.	<u>5</u> "
James C. Hathaway, Florence and Kemp-	Clara	3 66
ton streets,	Crown.	1 4
Hazard wharf,	Ball & Fitts rotary.	2 "
N. P. Hayes, William street,	Crown.	1 "
B. F. Howland, Est., 93 Grinnell street,	Crown.	1 66
Geo. Howland's wharf,	Ball & Fitts rotary.	2 "
Paul Howland, State street,	Ball & Fitts rotary.	3 66
James A. Jay, Second street,	Crown.	1 "
D. J. Kane & Bro., Union street,	Crown.	5 66
Tillinghast Kirby, Cypress street,	Crown.	3 46
C. W. Knight, Purchase street,	Crown.	1 22 4 1 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
James M. Lawton, State street,	Crown.	3 66
Robert Leuchsering, 134 Acushnet avenue	Crown.	1 66

TABLE C.—Concluded.

LOCATION.	PATTERN.	SIZE		
E. R. Lewis, Union street,	Crown.	1		
Joseph Longfield, Emerson street,	Crown.	5 8		
C. E. E. Mosher, High street,	Crown.	58342		
Merrill's wharf,	Ball & Fitts.	$ \hat{2} $		
Mt. Washington Glass Works, Prospect				
street.	Ball & Fitts rotary.	2		
George Needham & Co., Union street,	Ball & Fitts rotary.			
New Bedford Manufacturing Co.,	Ball & Fitts rotary.	3 4 6		
New Bedford Yacht Club, Pope's Island,	Ball & Fitts.	ĭ		
Vichols & Damon, Purchase street,	Ball & Fitts rotary.	5		
Leander P. Nichols, Foster street,	Ball & Fitts rotary.	58346		
Oneko Mills, Purchase street,	Ball & Fitts rotary.	6		
Pairpoint Manufacturing Co., Prospect		0		
street,	Ball & Fitts rotary.	3		
W. Perry, Thomas street,	Crown.			
P. & R. Coal and Iron Co., wharf,	Crown.	343		
George Pickens, Summer street,	Ball & Fitts rotary.			
William F. Potter & Co., Front street,	Crown.	1 1		
Thomas Pelan, Kempton and Florence,	Crown.			
Robeson Building, William street,	Crown.	3412123		
	Crown.	12		
Same, Rotch's wharf.	Gem.	2		
	Ball & Fitts.			
Salisbury & Viall, Cove street,		13		
C. R. Sherman & Son, Water and William	11-			
A. G. Stanton, Grinnell street,	Crown.	3 4 1		
Levi H. Sturtevant, North street,	Ball & Fitts rotary.			
V. D. Swan, Front street,	Ball & Fitts rotary.	2		
Swan & Finch, Hasting's wharf,	Crown.	2		
Taber, Read & Gardner, Acushnet avenue		1		
laber's wharf,	Ball & Fitts.	2		
George M. Thatcher, Rockland street,	Crown.	1		
Alfred Thornton, Union street,	Crown.	5 8 3		
Vineyard Steamboat Co., wharf,	Crown.	3		
William Walker, Maxfield and Summer				
streets,	Equitable.	3		
William Walker, County and Campbel	1			
streets,	Crown.	3		
Wamsutta Mills,	Ball & Fitts rotary.	8		
Dr. Helen W. Webster, Purchase street,	Equitable.	1		
Wordell Bros., William street,	Crown.	3		

Number of meters in use Dec. 1, 1886, 82.

TABLE D.

Motors.

LOCATION.	USED FOR.	Su	ze of pply ipe.
Baptist Church, William street,	Blowing organ.	21	inch
Central Union Store, 5 North Sixth st.,	Grinding coffee.	$1rac{1}{4}$	66
C. S. and B. Cummings, 102 William st.,	Grinding coffee.	2	
Benjamin Dawson, Purchase and Hazard	8	_	6.6
streets.	Elevator.	11/2	6.6
	Ice cream freezing.	1	4.6
Driscol, Church & Hall, Union and First			
streets,	Elevator.	3	6.6
	Elevator.	3	6.6
Giles S. Fales, Water and Elm streets,	Machinists.	3	66
Haskell & Tripp, William street,	Elevator.	3	66
N. P. Haves, William street,	Elevator.	1	6.6
	Clipping machine.	1	6.6
D. J. Kane & Bro., 110 Union street,	Book Bindery.	2	66
Dr. E. V. McLeod, Purchase and Will-			66
iam streets.	Dentist.	5	6.6
	Dentist.	8 5 8	66
North Congregational church, Purchase		10	
and Elm streets,	Blowing organ.	3	4.4
	Grinding coffee.	1	44
	Blowing organ.	2	6.6
C. R. Sherman & Son, Water and William	2.0 11		6.6
	Instrument making.	2	6.6
	Wood turning.	3	6.6
	Sewing machine lathe.	1	44
	Lathe.	1	6.6
	Blowing organ.	2	64
Unitarian Church, Union and Eighth sts.,	Blowing organ.	$\frac{2}{2}$	44
Vinal & Tuell, 70 Purchase street,	Grinding coffee.	11	66
Dr. E. F. Ward, Union and Sixth streets,		$\frac{1_2}{\frac{5}{8}}$	6.6
	Sausage cutting.	9	66

Total number now in use, 26.

TABLE E. LOCATION AND SIZE OF PIPE LAID IN 1886.

	Cast iron.			1.	
STREETS.	20 in.	10 in.	8 in.	6 in.	4 in.
Atlantic street, Arnold south, Blackmer street, County east, Borden street, end of pipe to 95 feet west of		0.0		201	
Dartmouth, Bowditch street, end of pipe to 90 feet north of Weld, Campbell street, end of pipe to State,		96			87 174
Campbell street, end of pipe to 144 feet west of Cypress, Cedar Grove street, Bowditch west, Codar Grove street, and of pipe to Frent				275	234
Cedar Grove street, end of pipe to Front, 'Cedar Grove street, Front east, Chancery street, end of pipe to 221 feet south of Elm,				206	17
Chancery street, Parker north, Chestnut street, Locust to north line Pope, Clark street, end of pipe to County, Coggeshall street, end of pipe to County,				290 269 32	167
County street, end of pipe to Rivet, County street, Clark south, County street, Coggeshall north, Cypress street, Kempton south,			633	198 234 29	
Cypress street, Willis south, Cypress street, Locust north, Dartmouth street, end of pipe to Rockland, First street, Potomska south, Fourth street, end of pipe to 48 feet south of			64	103	263 350
Thompson, Hawthorn street, end of pipe to 301 feet west of Brigham, Hillman street, Pleasant east, Hillman street, County west,		30	216	101	37
Kempton street, end of pipe to 16 feet east of Rockdale avenue, Liberty street, end of pipe south of Kempton			404		
south, Lindsey street, Morgan south, Locust street, Cedar west, Merrimac street, State east,		166	301		84 79
Morgan street, South Lindsey east, Newton street, end of pipe to $1\frac{1}{2}$ feet north of Elm.		100		84	56
North street, Water to Second, North street, Pleasant east, North street, Florence west, Park street, Court to Union,			30 263		173
Pearl street, Pleasant east,		40			

TABLE E.—Continued.

CUNDTAINING	Cast iron.						
STREETS.	20 in.	10 in.	8 in.	6 in. 4	4 in		
Pleasant street, Kempton to Pearl, Reynold street, end of pipe to 268 feet north of Weld, Richmond street, Parker north, Robeson street, Ashland west,				208 263 210			
Rockland street, end of pipe to 13½ feet west of Orchard, Rockland street, Dartmouth east, Rounds street, Kempton south, Union street, Park west,			765 179	358	308		
Winsor street, County west, Total,	2294	332		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2084		

TAKEN UP.

STREETS.		Cement Lined. Cast Iro						
	8	in.	4 in.	6 in.	4 in.			
Hillman street, Pleasant east, North street, Pleasant east, Pleasant street, Pearl to Sycamore, Pleasant street, Sycamore to Hillman, Pleasant street, Hillman to North,		30	30	632	948			
Total,		30	30	632	1,248			

TABLE E. - Concluded.

SUMMARY.

	30 in.	24 in.	20 in.	16 in.	12 in.	10 in.	8 in.	6 in.	4 in.
Previous to 1886: Cement, Cast iron,	1,879	1,972	865	16,567	6,179 3,110	5,722 5,849	7,544 $37,810$	9,342 $70,225$	20,712 $77,627$
Cast iron laid 1886,			2,294			332	2,855	3,883	2,084
Total pipe laid, Cement re-	1,879	1,972	3,159	16,567	9,289	11,903	48,209	83,450	100,423
moved 1886,							30		30
Cast iron removed 1886,								632	1,248
Total pipe now in use,	1,879	1,972	3,159	16,567	9,289	11,903	48,179	82,818	99,145

Total length laid in 1886, 11,448 feet= $2\frac{1.680}{10000}$ miles. Total length removed in 1886, 1,940 feet= $2\frac{3.675}{10000}$ miles. Total length of pipe now in use, 274,911 feet= $52\frac{6.65}{10000}$ miles.

TABLE F. LOCATION OF STOP GATES SET IN 1886.

STREETS.		Size.						
STREET,	20 in.	10 in.	8 in.	6 in.	4 in			
Atlantic street, south side Arnold,				1				
Crapo street, south side Rockland,					1			
County street, south side Rivet,			1					
Chancery street, north side Parker,				1				
Campbell street, east side Pleasant,	1				1			
Campbell street, west side Pleasant,					1			
Cypress street, south side Kempton,				1				
Hillman street, west side County,			- 4	1				
Hillman street, west side Pleasant, Hillman street, east side Pleasant,		-	1					
Kempton street, east side Reed,		1	1					
Locust street, west side Cedar,			1					
Merrimac street, east side State,		1-1	1					
Mill street, east side Pleasant,		1		1				
Mill street, west side Pleasant,	1.			1				
Maxfield street, east side Pleasant,				1	1			
Maxfield street, west side Pleasant,					1			
North street, west side Water,				11				
North street, east side Pleasant,		.4 .	1					
North street, west side Pleasant,			-		1			
Park street, south side Court,		1	1					
Pleasant street, north side Kempton,	1							
Pleasant street, north side Maxfield,	1							
Pleasant street, at hydrant foot of Sycamore,				1				
Pleasant street, south side Pearl,	1	1						
Pearl street, east side Pleasant, Pearl street, west side Pleasant,	1				-			
Richmond street, north side Parker,	1 .*			1	1			
Rockland street, west side Crapo,			1	1				
Rockland street, west side Dartmouth,			1					
Robeson street, west side Ashland,			1	1				
Rounds street, south side Kempton,				1	1.1			
Sycamore street, west side Pleasant,				1				
Winsor street, west side County,				1				
Willis street, east side Pleasant,				1				
Willis street, west side Pleasant,				1				
Total,	3	3	8	14	8			

Pleasant street, south side Campbell, Pleasant street, south side Hillman,		1 4-inch 1 4-inch
Number of stop gates set in 1886, Number removed in 1886,		$\begin{array}{c} 36 \\ 2 \end{array}$
Number in use at date of last report,	A.S. 46	34 475

TABLE G.

Location of Hydrants set in 1886.

Atlantic street, west side, 186 feet south of Arnold. Post. Campbell street, southwest corner of Cypress. Post. Cedar Grove street, southeast corner of Front. Post. Chancery street, west side, 263 feet north of Parker. Post. County street, northwest corner of Winsor. Post. County street, northwest corner of Rivet. Post. County street, southwest corner of Thompson. Post. County street, west side, 184 feet south of Clark. Post. County street, west side, 200 feet north of Coggeshall. Post. Court street, northeast corner of Ash. Post. Cypress street, southwest corner of Kempton. Post. Cypress street, west side, 263 feet north of Locust. Post. Hawthorn street, southwest corner of Brigham. Post. Hawthorn street, south side, 301 feet west of Brigham. Post. Kempton street, southwest corner of Francis. Post. Locust street, southeast corner of Richmond. Post. Maxfield street, southwest corner of Pleasant. Post. Newton street, northwest corner of Elm. Post. North street, southeast corner of Second. Post. North street, northwest corner of Pleasant. Post. Pearl street, southwest corner of Pleasant. Post. Pleasant street, east side, opposite Sycamore. Post. Reynold street, west side, 268 feet north of Weld. Post. Robeson street, southwest corner of Ashland. Post. Rockland street, south side, 13 feet west of Orchard. Rockland street, south side, 162 feet east of Dartmouth. Post. Rounds street, west side, 295 feet south of Kempton. Post. Union street, south side, 344 feet west of Park. Post. Willis street, southeast corner of Pleasant. Post. Winsor street, south side, 300 feet west of County.

TAKEN UP.

Campbell street, south side, 123 feet west of Chestnut. County street, southwest corner of Thompson. Flush. County street, northwest corner of Rivet. Flush. Hawthorn street, south side, 89 feet west of Brigham. Post. Kempton street, south side, opposite Cypress. Flush. Newton street, west side, 83 feet north of Elm. Post. Pleasant street, northwest corner of Hillman. Flush. Pleasant street, southwest corner of Sycamore. Flush. Pleasant street, southwest corner of Willis. Flush.

Total number set during 1886.

Total number in use Dec. 1, 1886,

Total number taken up during 1886,	
To be added to total number last reported, Number in use at date of last report,	$\frac{2}{36}$

30

TABLE H.

SMALL SIZE DISTRIBUTION PIPE LAID IN 1886.

STREETS.	LEAD.
DIRECTO.	$\frac{3}{4}$ in. 1 in.
Dartmouth street, Fair north, Merrimac street court, Merrimac north,	123
Total,	123 149

Total length laid in 1886, 272 feet = $0.05.2 \atop 100.0$ miles. Previously laid, 5,930 feet = $1.12.3 \atop 100.0$ miles. Total length now in use, 6,202 feet = $1.17.5 \atop 100.0$ miles.

TABLE I.

WASTE GATES SET IN 1886.

LOCATION AND SIZE.	4 in.
Mill street, west side Pleasant, Maxfield street, east side Pleasant, Maxfield street, west side Pleasant, North street, west side Pleasant, North street, west side Water, Pearl street, at Pleasant, Pearl street, at Pleasant, Rockland street, west side Crapo,	1 1 1 1 1 1 1
Total,	8

Number set during 1886,	8
Previously set,	43
	~_
Number in use Dec. 1, 1886,	16

TABLE J. SMALL SIZED STOP GATES SET IN 1886.

				SIZE.	
			2 in.	1 in.	$\frac{3}{4}$ in.
ing car	et hy	drant,	1		
		66			
6.0		66			
. 60		66			
6.0		44	1		
					1
g cart	hydi	ant,	1		
66			1		
6.6	4.4				
6.6	66				
4.6	6.6				
44	. 66		1		
errima	e.			1	
		hydrant.	. 1		
"	66	66	1		
66	6.6	6.6			
6.6	4.6	6.6			
6.6	4.6	66			
6.6	6.6	66]		
66	44	66	1		
66	64	6.6	1		
			19	1	1
	g cart "" errima tering "" "" "" "" "" "" "" "" "" "" "" "" ""	g eart hydr "" "" "" "" "" "" "" "" ""	g cart hydrant, """ """ """ """ """ """ """	ing eart hydrant, """" """" """" """" """" """" """"	ing eart hydrant,

Removed, Robeson street, west side Ashland, 1 inch,	.1
Previous,	20 37
Total number now in use,	57

TABLE K.

PRIVATE STOP GATES SET IN 1886.

LOCATION.	SI	ZE.
	6 in.	2 in.
Court street, south side, at Bristol County Court House, Front street, east side, at Merrill's wharf, Hicks street, north side, at Nazaire Bowin, Middle street, north side, at Electric Lighting Co., North street, north side, at N. B. Manfg. Co., North street, north side, at N. B. Manfg. Co., at meter, Purchase street, west side, at Benjamin Dawson, School street, north side, at Electric Lighting Co.,	1 3	1 1 1 1 1 1 1 1 1
Total,	4	(;
Number of private stop gates set in 1886, Previous,		10 96
Total number now in use,		106

TABLE L.

WATERING CART HYDRANTS.

Allen street, north side, 154 feet east of Page. Bedford street, south side, 86 feet west of Fourth. Campbell street, south side, 87 feet west of Purchase. Cedar Grove street, south side, 18 feet west of Acushnet avenue. Coffin avenue, south side, 7 feet east of Bowditch. Court street, north side, 15 feet east of Ash. Dartmouth street, east side, 13 feet south of Oak. First street, west side, 118 feet south of School. First street, west side, 28 feet south of Grinnell. Grinnell street, south side, 31 feet east of County. Hawthorn street, south side, 17 feet east of Cottage. Hawthorn street, head of Tremont. Hazard street, south side, 21 feet west of Purchase. Kempton street, south side, 72 feet west of County. Kempton street, south street, 102 feet east of Newton. Kempton street, south side, 16 feet east of Rockdale avenue. Linden street, south side, 30 feet west of Purchase. Locust street, south side, 25 feet west of County. Madison street, south side, 17 feet east of Fourth. Madison street, south side, 39 feet west of County. Mill steeet, south side, 9 feet west of Purchase. Middle Point Road, south side, 58 feet east of French avenue. Mt. Vernon street, south side, 14 feet west of Pleasant. Pleasant street, east side, 9 feet north of Mechanics Lane. Reynolds street, west side, 8 feet north of Linden. Robeson street, south side, 38 feet west of Cedar. Smith street, south side, 53 feet east of Park. Summer street, west side, 4 feet north of Hillman. Sycamore street, south side, 77 feet west of County. Thompson street, south side, 72 feet west of Warwick. Union street, south side, 65 feet west of County. Water street, west side, 6 feet south of Blackmer. William street, south side, 27 feet east of Second.

TABLE M.

STATEMENT OF WORK DONE BY THE SERVICE DEPART-MENT FOR THE YEAR ENDING DEC. 1, 1886.

KIND AND SIZE.	Number of services.	Length on premises of taker.	Length in street.
Lead pipe, ½ inch heavy,	59	879.0	1310
" $\frac{5}{8}$ inch heavy,	72	908.0	1478
" $\frac{5}{8}$ inch light,	79	968.5	1447
" a inch heavy,	3	139.5	44
" ³ / ₄ inch light,	28	257.0	482
" 1 inch heavy,	4	26.5	82
" 1 inch light,	9	254.0	178
Iron pipe, 2 inch,	5	245.0	
6 inch,	1	125.0	
Total,	260	3,802.5	5021

Two $\frac{5}{8}$ inch iron services have been taken up and replaced by $\frac{5}{8}$ heavy lead.

One $\frac{3}{4}$ inch iron service has been taken up and replaced by $\frac{3}{4}$ lead. One $\frac{3}{4}$ tin lined service has been taken up and replaced by 1 inch light lead.

EXTENSIONS MADE TO SERVICES PREVIOUSLY LAID.

	Number.	Length
Lead pipe $\frac{5}{8}$ inch heavy, " 1 inch light, " extension made by owner,	1 1 1	10 50
Total,	3	60

Length of service pipe laid during the year, 8,883.5 feet = $1\frac{6.825}{100000}$ miles. Total number of services in use Dec. 1, 1886, 5,225.

TABLE N.

LOCATION OF HYDRANTS.

	Pressure
Acushnet avenue, southwest corner of Coggeshall. Post	56
Acushnet avenue, southwest corner of Cedar Grove. Post	54
Acushnet avenue, west side, south of Logan 335 feet. Post	60
Acushnet avenue, west side, north of Wamsutta 514 feet Doub	le 62
Acushnet avenue, west side, north of Wamsutta 372 feet. Post	60
Acushnet avenue, west side, south of Wamsutta 255 feet	63
Acushnet avenue, west side, at end of Wall street. Post	62
Acushnet avenue, southeast corner of Pope	64
Acushnet avenue, northwest corner of Willis	61
Acushnet avenue, west side, south of Campbell 179 feet	59
Acushnet avenue, northwest corner of Maxfield	57
Acushnet avenue, northwest corner of Kempton	47
Acushnet avenue, northeast corner of Elm	47
Acushnet avenue, northwest corner of School. Post	51
Acushnet avenue, northwest corner of Madison	55
Acushnet avenue, northwest corner of Russell	58
Acushnet avenue, northwest corner of Bedford	59
Acushnet avenue, west side, opposite Howland	61
Acushnet avenue, northwest corner of Potomska. Post	50
Acushnet avenue, west side, south of Potomska 236 feet. Post	59
Acushnet avenue, southwest corner of Blackmer	60
Allen street, southeast corner of Bonney	46
Allen street, northwest corner of Ward	41
Allen street, north side, east of Page 159 feet	38
Arch street, southwest corner of Union	24
Arnold street, south side, west of Orchard 96 feet. Post	
Arnold street, southwest corner of Chancery	
Arnold street, southeast corner of Atlantic	
Ash street, northwest corner of Middle	

WATER REPORT.

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WATER REPORT.

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County street, northwest corner of Madison
County street, southwest corner of Hawthorn
County street, northwest corner of Allen
County street, southwest corner of Grinnell
County street, west side, head of South
County street, northwest corner of Rockland
County street, southwest corner of Thompson. Post
County street, northwest corner of Rivet. Post
County street, northwest corner of Winsor. Post
County street, west side, 71 feet north of Division. Post 54
County street, northwest corner of Cove road. Post 62
Court street, southwest corner of Orchard
Court street, south side, opposite Cedar
Court street, northeast corner of Ash. Post
Court street, south side, opposite Emerson
Court street, south side, front of Tannery
Court street, south side, head of Jenney. Post
Court street, south side, east of Reed 300 feet. Post
Cove street, south side, east of Water 487 feet
Cove street, south side, west of Water $334\frac{1}{2}$ feet. Post60
Cove street, southeast corner of County. Post
Crapo street, west side, south of Washington 343 feet 60
Crapo street, west side, south of Rockland 225 feet
Crapo street, west side, 160 feet south of Thompson. Post58
Cypress street, southwest corner of Kempton. Post
Cypress street, northwest corner of Hillman
Cypress street, northwest corner of Sycamore
Cypress street, west side, 237 feet north of Locust. Post20
Dartmouth street, east side, southwest of Orchard 110 feet 47
Dartmouth street, east side, 125 feet south of Hickory. Post 47
Delano street, southwest corner of Water. Post
Delano street, southeast corner of Acushnet avenue. Post 57
Durfee street, southwest corner of Cedar. Double
Elm street, southwest corner of Pleasant
Elm street, southwest corner of Summer
Emerson street, southwest corner of Willis · ·
Emerson street, southwest corner of Parker
Fifth street, southwest corner of School, Post45

Fifth street, west side, south of Madison 245 feet 50
Fifth street, northwest corner of Grinnell 61
First street, southwest corner of Spring
First street, west side, south of School 109 feet
First street, west street, south of Howland 185 feet
First street, west side, south of South 255 feet
Florence street, west side, north of North 180 feet. Post 26
Florence street, northwest corner of Mill. Post
Florence street, west side, south of Kempton 126 feet. Post 23
Florence street, southwest corner of Morgan. Post
Forest street, south side, west of County 90 feet
Foster street, southwest corner of Maxfield
Foster street, northwest corner of High
Fourth street, west side, north of School 106 feet
Fourth street, west side, south of Madison 210 feet
Fourth street, east side, opposite Washington. Post 57
Fourth street, northwest corner of Rockland
Fourth street, west side, south of Potomska 61 feet. Post
Franklin street, southwest corner of Pleasant
French avenue, west side, south of Cove road 14 feet
Front street, west side, south of Washburn 319 feet
Front street, west side, south of Logan 383 feet. Post
Front street, southeast corner of Wamsutta. Post
Front street, southwest corner of Hazard's lane
Front street, southwest corner of Centre
Front street, west side, south of Commercial 86 feet
Front street, northwest corner of lane head of Merrill's wharf 65
Front street, west side, south of Howland 268 feet. Post 61
Front street, west side, south of South 330 feet. Post 62
Front street, west side, north of Delano 191 feet. Post 62
Grape street, south side, west of Lewis 131 feet. Post30
Grape street, south side, west of Lewis $517\frac{1}{2}$ feet. Post34
Griffin street, southwest corner of Second
Grinnell street, south side, west of Acushnet avenue 76 feet 66
Grinnell street, south side, east of Crapo 103 feet
Grinnell street, southwest corner of Orchard. Post
Grove street, southwest corner of Anthony
Hawthorn street, southeast corner of Page

Hawthorn street, south side, east of Tremont 147 feet. Post 28
Hawthorn street, southwest corner of Brigham. Post26
Hawthorn street, south side, 301 feet west of Brigham. Post 24
Hazard street, south side, west of State 140 feet
Hazard street, southwest corner of Pleasant
Hicks street, south side, east of Acushnet avenue 276 feet. Post 56
High street, south side, east of Acushnet avenue 43 feet 48
High street, south side, east of County 177 feet
Hillman street, southwest corner of Second
Hillman street, southeast corner of Hill
Howland street, northeast corner of Second
Irving court, north end of court
Kempton street, southwest corner of Pleasant. Post36
Kempton street, south side, opposite Hill
Kempton street, southwest corner of Summer
Kempton street, southwest corner of Emerson
Kempton street, southwest corner of Park
Kempton street, southwest corner of Liberty
Kempton street, southeast corner of Jenney
Kempton street, south side, west of Hunter 50 feet. Post21
Kempton street, southwest corner of Francis. Post14
Kilburn street, north side, east of Front 244 feet. Post 62
Kilburn street, north side, east of Front 581 feet. Post64
Liberty street, west side, south of Kempton 339 feet 30
Lincoln street, west side, south of Union 171 feet
Linden street, south side, west of State $13\frac{1}{2}$ feet. Post
Linden street, south side, west of County 169 feet. Post 34
Linden street, south side, east of Ashland 343 feet
Lindsey street, west side, 173 feet south of Kempton. Post27
Lindsey street, northwest corner of Morgan. Post
Locust street, southwest corner of Chestnut. Post
Locust street, southeast corner of Richmond. Post 15
Logan street, southwest corner of North Front
Logan street, south side, east of Acushnet avenue 400 feet 62
Logan street, southwest corner of Acushnet avenue
Madison street, southwest corner of First
Maitland street, south side, west of Cedar 305 feet. Post14
Maxfield street, southwest corner of Second. Post

Maxfield street, southwest corner of Pleasant. Post38
Maxfield street, southeast corner of Chestnut
Maxfield street, southeast corner of Spruce
Maxfield street, southwest corner of Ash. Post22
Mechanics lane, north side, east of Eighth street 206 feet 30
Middle street, southeast corner of Second
Middle street, southeast corner of Sixth. Double
Middle street, south side, east of Cedar 371 feet
Middle street, southeast corner of Chancery
Mill street, south side, west of Hill 191 feet
Mill street, south side, west of Ash 45 feet
Morgan street, southwest corner of Cottage
Mosher street, south side, west of County 517 feet. Post59
Mt. Pleasant street, southeast corner of Distributing Reservoir 4
Mt. Pleasant street, west side, north of Durfee 572 feet 8
Mt. Pleasant street, northwest corner of Durfee
Mt. Vernon street, south side, 359 feet west of Mt. Pleasant (
Newton street, northwest corner of Elm. Post
North street, southeast corner of Second. Post
North street, southeast corner of Acushnet avenue
North street, northwest corner of Pleasant. Post
North street, southwest corner of Foster
North street, southwest corner of Hunter. Post
Oak street, southwest corner of Harrison. Post
Old Point road, west side, east of French avenue 650 feet
Orchard street, west side, head of Madison
Park street, west side, south of Kempton 339 feet. Post 27
Park street, northwest corner of Court. Post 28
Parker street, southwest corner of Summer
Pearl street, southwest corner of Pleasant. Post
Penniman street, south side, west of State 220 feet
Pine street, northwest corner of Cross
Pleasant street, southwest corner of Market
Pleasant street, west side, north of William 53 feet. Post 38
Pleasant street, east side, foot of Sycamore street. Post 3
Pleasant street, northwest corner of Pope
Pleasant street, northwest corner of Austin
Pleasant street, southwest corner of Lindon

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Pleasant street, southwest corner of Weld. Post48
Pope street, south side, opposite North Oak
(A group of three post hydrants located about
Potomska street, 300 feet east of Prospect and 91 feet north
of south line of Potomska street 62
Prospect street, west side, south of Howland 157 feet 64
Prospect street, northwest corner of Grinnell
Prospect street, west side, north of Potomska $324\frac{1}{2}$ feet. Post62
Prospect street, northwest corner of Potomska. Post 63
Purchase street, northwest corner of Deane. Post
Purchase street, west side, opposite Oneko Mill. Post48
Purchase street, east side, opposite Clark. Post
Purchase street, west side, opposite Logan
Purchase street, northwest corner of Austin
Purchase street, northwest corner of Merrimac. Double 51
Purchase street, northwest corner of Pope
Purchase street, southwest corner of Pearl. Double
Purchase street, southwest corner of Campbell
Purchase street, west side, north of Maxfield 343 feet. Double 46
Purchase street, southwest corner of Hillman. Double 43
Purchase street, southwest corner of Mill
Purchase street, northwest corner of Middle
Purchase street, northwest corner of Mechanics lane. Post 40
Purchase street, northwest corner of Union
Reynolds street, southwest corner of Weld. Post 26
Reynolds street, west side, 268 feet north of Weld. Post29
Ricketson court, south side, west of Sixth 306 feet
Rivet street, southwest corner of Second
Robeson street, southwest corner of County
Robeson street, southwest corner of Ashland. Post15
Robeson street, southeast corner of Cedar. Post21
Robeson street, south side, 365 feet west of Cedar. Post17
Rock street, southwest corner of Washburn. Post61
Rockland street, southeast corner of Hall. Post56
Rockland street, south side, 13 feet west of Orchard. Post54
Rockland street, south $$ side, 162 feet east of Dartmouth. Post 45
Rounds street, west side, 295 feet south of Kempton. Post18
Russell street, south side, east of Fifth 92 feet

Second street, northwest corner of Mill	
Second street, west side, south of Elm 52 feet. Post	52
Second street, west side, south of Spring 74 feet	
Second street, northwest corner of Coffin	61
Second street, west side, at head of Morgan's lane. Post	60
Second street, west side, north of Grinnell 61 feet	(;;)
Second street, west side, north of Potomska 232 feet. Post	61
Second street, west side, south of Potomska 122 feet. Post	63
Second street, west side, 188 feet south of Blackmer. Post	59
Seventh street, southwest corner of Union. Post	31
Seventh street, west side, north of Madison 50 feet	30
Sherman street, south side, west of County 314 feet	51
Sixth street, southwest corner of William	30
Sixth street, southwest corner of School	37
Sixth street, northwest corner of Madison	42
Sixth street, southwest corner of Russell	47
Sixth street, northwest corner of Wing	56
Sixth street, west side, north of Grinnell 194 feet	59
Smith street, southwest corner of Chestnut. Double	22
Smith street, southeast corner of Spruce. Double	20
Smith street, southeast corner of Emerson	22
Smith street, south side, west of Emerson 404 feet	27
South street, southwest corner of Acushnet avenue	62
South street, southwest corner of Second	62
South street, southwest corner of Prospect	64
Spring street, southeast corner of Acushnet avenue. Post	51
Spring street, southwest corner of Seventh	32
Spring street, southeast corner of Fifth	42
State street, northwest corner of Sycamore	:3.5
State street, southwest corner of Pearl	34
State street, southwest corner of Franklin	37
State street, northwest corner of Merrimac	39
Summer street, northwest corner of North	16
Summer street, northwest corner of Hillman	16
Summer street, southwest corner of Willis	26
Sycamore street, southwest corner of Thomas	
Sycamore street, southwest corner of Summer	
Sycamore street, south side, west of Ash 68 feet	. 22

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Taber's wharf,	south side, north of	Union 36 feet	
	northwest corner of		
	t, south side, 20 fee		
	southwest corner		
	west side, south of		
	outhwest corner of		
	outheast corner of		
	outhwest corner of		
	uthwest corner of 8		
	uth side, 344 feet w		
	southwest corner of		
	th side, east of Acu		
	northwest corner of		
	outhwest corner of		
	southeast corner of		
	outhwest corner of		
	t, south side, west		
	t, south side, west		
	t, south side, east of		
Washburn stree	t, southeast corner	of Acushnet avenu	ae 59
	t, south side, west o		
	eet, southeast corner		
	eet, south side, west		
_	eet, southeast corne		
	uthwest corner of		
	uthwest corner of 1		
	est side, south of N		
,	orthwest corner of		
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	est side, north of So		
	orthwest corner of		
	ortheast corner of		
	orthwest corner of		
	est side, head of L		
	orthwest corner of I		
	orthwest corner of		
	orthwest corner of		

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Water street, west side, north of Potomska 31 feet	64
Water street, northwest corner of Rivet	65
Water street, southwest corner of Blackmer	62
Water street, southwest corner of Delano	62
Water street, west side, south of Division 285 feet	62
Water street, southwest corner of Cove	61
Weld street, southwest corner State. Post	4:
William street, southwest corner of Bethel	51
William street, southeast corner of Acushnet avenue	47
William street, southwest corner of Eighth	20
Willis street, southeast corner of Pleasant. Post	41
Willis street, southwest corner of State	31
Willis street, south side, east of Summer 200 feet. Post	2
Willis street, southwest corner of Cypress. Post	19
Willis street, south side, west of Cedar 200 feet	18
Wing street, southwest corner of Fourth	57
Winsor street, south side, 300 feet west of County. Post	57
Number of flush hydrants,	244
Number of post hydrants,	144

Total number of hydrants,

SUMMARY OF STATISTICS.

REPORT OF 1886.

IN ACCORDANCE WITH SUGGESTIONS ADOPTED BY THE

New England Water Works Association.

NEW BEDFORD WATER WORKS, BRISTOL COUNTY, MASS.

Population by census of 1885,

33,393

Date of construction,

1866 to 1869, inclusive.

By whom owned,

The property of the city of New Bedford.

Source of supply,

From a storing reservoir artificially formed by constructing a dam across the valley of the Acushnet river, seven miles north of the centre of the city.

Mode of supply,

By gravitation into the city, thence pumped into a distributing reservoir on an elevated site.

PUMPING.

1. Builders of pumping machinery,

- a. McAlpine engine, built by Quintard Iron Works.
- b. Worthington engine, built by Henry R. Worthington.
- c. High duty Worthington engine, built by Henry R. Worthington.

2. Description of coal used,

1st Contract.

- a. Anthracite.
- b. Not applicable.
- c. Size, broken.
- d. Brand, Philadelphia & Reading free white ash.
- e. Price per gross ton delivered, \$4.30.
- f. Percentage of ash, 13_{10}^{6} .
- g. Wood, price per cord, \$4.00.

2d Contract.

- a. Anthracite.
- b. Not applicable.
- c. Size, egg.
- d. Brand, "Lindermann's" sugar loaf Lehigh.

Worthington

- e. Price per gross ton delivered, \$5.00.
- f. Percentage of ash, $10\frac{2}{10}$.

3.	Coal consumed for the	McAlpine.	Worthington.	from June 1.
	year, in pounds,	541,320	1,116,700	479,893
4.	Lbs. of wood consumed in pounds, 3 — = coal	1,673	3,854	1,800
5-	Total fuel consumed for the year, $(3) + (4)$,			
6		542,993	1,120,554	481,693
0.	Total pumpage for the year, in gallons,	260,299,173	438,707,088	305,559,506
7.	Av. static head against			
0	which pumps work,	124.9	124.4	125.9
0.	Av. dynamic head against which pumps work,	L		
٥.	a. Number of gallons	130.9	126.1	128.0
	pumped per pounds			
	of coal (3),	481	392	636

Worthington high duty
McAlpine. Worthington. from June 1.

b. Number of gallons raised 100 feet per pound of coal for total coal (3),

630 495 815

10. Duty, in foot pounds per
100 pounds of coal,
using following formula, making no deductions for starting,
banking fires, heating
building, or anything
else:

52,334,039 41,173,994 67,717,588

Duty = Gallons pumped (6) x 8 34 (lbs.) x 100 x dynamic head (8)

Total fuel consumed (5)

Cost of Pumping Figured on Pumping Station Expenses, viz.: \$18,702.40.*

11. Per million gallons raised against average dynamic head (8) into reservoir,

817.21

12. Per million gallons raised one foot high (dynamic),

 13_{1000}^{457} cents.

Cost of Pumping Figured on Total Maintenance (see Financial CC.), viz.: \$86,014.89.

13. Per million gallons raised against average dynamic head (8) into reservoir,

\$79.15

14. Per million gallons raised one foot high (dynamic),

 61_{1000}^{882} cents.

^{*}There is included in this amount an item of \$9,232.06 for extensive repairs to the old pumping machinery. This extra amount added to the ordinary running expenses nearly doubles the cost of pumping for this year.

FINANCIAL.
MAINTENANCE.

RECERPTS.		ENPENDITURES.	
From consumers:			
A. Water rates, domestic, B. Water rates, manufacturing,	\$40,113.24	AA. Management and repairs, BB. Interest on bonds,	\$36,314.89 49,700.00
c. Net receipts from water, D. Miscellaneous, (rents, repairs, etc.,)	\$43,530.43 (,)	cc. Sonds paid,	\$86,014.89
E. Total, From public funds:	\$43,918.46	DD. Dalance to construction,	19,603.57
General appropriation, water, General appropriation, debt,	\$12,000.00		
K. Gross receipts from all sources,	\$135,618.46	KK. Total,	\$135,618.46

FINANCIAL—Continued. CONSTRUCTION.

RECEIPTS.		EXPENDITURES.	
Balance from previous year,	Н.	FF. Extension, mains,	
R. Balance from maintenance,	66.	GG. Extension, services.	\$22,065.34
s. Bonds issued,		a. Services, \$4,460.30 b. Fountains, meters. 1,168.18	5,628.48
T. Appropriation from tax levy,	HH.	HII. Special extensions,	14.116.26
v. Other sources, (service private lines, meters, etc.,)	11.	II. Total construction for year,	041 040 00
	JJ.	3,607.87 JJ. Balance,	9+1,510.08
			26,105.81
v. Total,.	KK.	кк. Total,	#67.915.89

Bonded debt at this date, \$720,000; Trust fund, \$100,000=\$820,000 · \$1,259,402.21 w. Net cost of works to this date,

v. No sinking fund.

 $.05\frac{83}{100}$ per cent. Average rate of interest,

CONSUMPTION.

I.	Estimated total population at date,	0.4.500
2.	Estimated population on lines of pipe at date	34,500
3.	Estimated population supplied at date,	30,251
	Total number gallons consumed for year,	28,480
4.		1,086,534,615
5.	Passed through domestic meters, 2,055,733 ga per cent.	llons or $0\frac{02}{100}$
6.	Passed through manuf. meters, $0.05,858,655$ $0.05,858,655$	gallons or cent.
7.	Average daily consumption, in gallons,) 0=0 00=
8.	Gallons per day to each inhabitant (1),	2,976,807
9.	Gallons per day to each consumer (3),	86
10.	Gallons per day to each tap (distribution 22	104
	1 0	569
	DISTRIBUTION.	
	MAINS.	
I.	Kind of pipe used,	and most thou
2.	Wrought iron cement lined, a	
3.	Extended, From 4 inch	to 30 inches.
4.	Discontinued,	11,448 feet.
· 5.	Total now in use,	1,940 feet.
		$2\frac{0655}{10000}$ miles.
		\$10.63
	Number of leaks for the year,	8
8.	Small distribution pipes, less than 4 inches, total length,	
g.	a. Fire hydrants added,	$1\frac{175}{1000}$ miles.
	b. Watering cart connections added,	21
	or tratering care connections added,	10

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10.	b. Number fire hydrants now in use, b. Number of watering cart hydrants now	388
	in use,	33
	Stop gates added,	34
12.	Number now in use,	509
13.	Small stop gates, less than 4 inch, total,	
14.	Number of blow-off gates,	57
15.	Range of pressure at centre for day and night,	51 6 lbs.
	SERVICES.	
16.	Kind of pipe used, Lead and cast	ivon
17.	Size,	
18.	Extended, From ½ to 8 in	ches.
19.	Discontinued.	feet.
20.	Total now in use,	
21.	Service taps added,	
22.	Number now in use,	260
	Average length of service,	5,225
	Average cost of service,	34.2
24.	Gross, §	\$17.92
25.	Meters added,	4.25
26.	Number now in use,	15
	a. Domestic,	45
0.5	b. Manufacturing,	37
·	Motors and elevators added,	1
28.	Number now in use,	96

REPORT OF TWO DUTY TESTS

OF A

Worthington High Duty Pumping Engine

AT THE

NEW BEDFORD WATER WORKS, IN JUNE, 1886.

NEW BEDFORD, Mass., November 11, 1886.

To the New Bedford Water Board:

Gentlemen: The undersigned were appointed by the Water Board as a committee to subject the engine to the tests mentioned in the contract and to see whether all the requirements thereof had been fulfilled.

The engine was built by Henry R. Worthington, and is essentially the same as the well known type so extensively used throughout the country, with the addition of an attachment which allows the steam to be used expansively, and by which greatly increased economy in the running of the engine has been secured.

As described by the builders, "the attachment consists briefly of two small oscillating cylinders attached to an extension of the plunger rod of the engine beyond the water end. These cylinders and their connecting pipes are filled with water. Compressed air from a storage tank is admitted at a suitable pressure to maintain a constant load upon the pistons in the cylinders through the medium of the interposed water.

"These pistons act in such a way with respect to the motion of the engine as to resist its advance at the commencement of the stroke and assist it at the end, the air, meanwhile, exerting its unvarying pressure at each point of the stroke.

"The two cylinders act in concert, and, being placed directly opposite each other, relieve the crosshead to which they are attached of any sliding frictional resistance, and the engine of any lateral strain.

"By thus alternately taking up and exerting power through the difference in the angle at which their force is applied with respect to the line of motion of the plunger rod, these two cylinders, in effect, perform the functions of a fly-wheel, but with the important mechanical difference that they utilize the constant pressure of compressed air instead of the energy of momentum. Their action is readily controlled, and their power can not only be exactly proportioned to the work to be overcome, but is entirely unaffected by the speed of the engine. The same amount of expansion can be obtained in the same engine whether running at a piston speed of ten feet per minute or at one hundred and fifty. This latter feature is of great importance, affecting as it does so favorably the economy of the engine when applied on any service where the demand is irregular or intermittent.

"Where such service is performed by a fly-wheel engine it is a well known fact that the best economic results are attained only when the engine is running at its full rated capacity, and that its economy rapidly falls as its speed is decreased. With every change in the rate of rotation of the fly-wheel a corresponding change in the point of cutoff must be made.

"When the speed is decreased the steam must be made to follow further in the stroke of the pistons, thus reducing the expansion, and consequently the efficiency of the engine. "The cut-off valves consist of semi-rotating plug-valves placed in the admission ports of the cylinders and operated by means of direct connections. Their action is secured without the use of any eccentrics, gears, or cams. When the point of the cut-off has been once fixed it need never be altered."

The engine worked under the disadvantage of having to take the steam through an unusually long steam pipe, 194 feet 3 inches in length, and the steam, which at the boiler was superheated, lost about 30 degrees of heat, so that at the engine it was two or three degrees below the temperature corresponding to the pressure in the boilers.

The general dimensions of the engine are as follows:

Diameter of high pressure cylinder,	18 inches.
Diameter of low pressure cylinder,	36 inches.
Diameter of plungers,	24 inches.
Stroke,	26 inches.

The vacuum is obtained by an independent condenser with a steam cylinder 6 inches diameter and 10 inches stroke, and a plunger $8\frac{1}{2}$ inches diameter.

The cylinders are steam-jacketed and all water of condensation is returned to the boilers by a small self-regulating steam pump.

The diameter of the suction pipe is 24 inches, and the diameter of the discharge pipe is also 24 inches, connecting outside of the engine house with a 30 inch force main 1879 feet long, which conveys the water to the distributing reservoir.

The dimensions of the boilers are as follows:

Diameter,	64 inches.
Height,	13 feet 7 inches.
128 tubes 2 inches diameter	10 feet long.
Total heating surface,	1190.1 square feet.
Grate surface of both boilers,	37.12 square feet.

The contract required that the engine should be capable of delivering 5,000,000 U. S. gallons in 24 hours with a piston speed of not over 90 feet per minute.

The second requirement was that the engine should be capable of performing a duty of 100,000,000 based upon the plunger displacement and the amount of combustible consumed, the trial to continue twelve hours.

The third requirement was that the engine should perform a duty of 80,000,000 during a practical test covering six days of ten hours each, the engine to be run at a speed which shall ensure the delivery of 5,000,000 gallons in 24 hours and all the fuel used to be taken into account.

According to the contract this duty test was calculated by the formula $\frac{P\times V\times\Pi \times 100}{F}$ wherein P represents the pounds of water delivered per stroke as ascertained by calculation of plunger displacement, V represents the number of strokes made during the trial, M the head pressure as ascertained by a gauge placed on the force main or force chamber of the pump. To the indications of this gauge when running was added the measured distance from the centre of said gauge to the average surface of water in the pump well. No allowance was made for friction through foot valve and supply pipe or any other part of the pumps, neither for any friction or increased resistance caused by bends or angles anywhere between said gauge and surface of water in pump well. F represents the number of pounds of coal actually consumed during the trial.

The engine was tested with regard to the first two requirements at the first trial on June 1, 1886, and the requirements of the contract were satisfactorily fulfilled.

The trial was conducted in the following manner:

The fires were started at 7.45 A. M. and the engine was started at 8.50 A. M. The regular test was begun at 12 o'clock, noon, when the condition of the fires was carefully

examined, and the test was continued for 12 hours and 5 minutes, when the condition of the fires, was, upon careful examination, considered to be the same as at the beginning.

The boilers used were two upright Corliss boilers, the dimensions of which are given on the preceding page, and they were fired alternately at intervals of about 30 minutes for each boiler.

Observations were taken every ten minutes of the reading of the counter and the pressure of the steam at the boiler and also at the engine, and observations were taken every thirty minutes of the vacuum in the condenser, water pressure gauge, height of water in the pump well, pressure of air in the air chamber, height of water in boilers, reading of the meter which registered the quantity of water pumped into the boilers, the reading of the air pump counter, and the temperature of the feed water at its entrance to, and exit from the heater, the temperatures of the air pump delivery, the pump well, engine room, outside air, the steam at the boiler and at the engine, and the temperature of the gases before entering and after leaving the heater.

The water pressure gauge was tested by comparison with a standard gauge of the Crosby Steam Gauge Co. and was found to be accurate within the limits registered during the trial.

The height of water in the well was obtained by two large float gauges, tested before each trial and also by actual measurement with a stick.

The temperature of the steam was taken by two thermometers inserted in the main steam pipe, one near the boilers and the other near the engine.

The latter was broken on the fourth day of the second test, so that these readings had to be discontinued.

The meter which registered the quantity of water de-

livered to the boilers was a 3-4 inch Worthington meter, which we were informed had been tested under approximately the same pressure as that to which it was subjected during the trial, but subsequent tests have convinced us that the meter readings are not sufficiently reliable, and it is intended to have at some early date a careful test to ascertain the evaporate power of the boilers.*

The barometer used was an aneroid placed in the engine room. It had been tested at the Royal Observatory at Greenwich.

Indicator diagrams from the steam cylinders were taken frequently. In order to ascertain the actual quantity of water pumped and the "slip" of the pumps, observations were taken at a weir carefully constructed at a point where the water enters the distributing reservoir. The length of the weir was 4 feet and observations were taken every minute for periods of one and two hours at a time.

The results of this first test showed that the engine had pumped at a rate of 6,233,511 gallons in 24 hours at an average piston speed of 94 feet per minute, an excess of 19 per cent. above the first contract requirement, and that the engine had performed a duty of 102,108,759, an excess of 2 per cent. above the second contract requirement.

The second test, to ascertain the duty during a period of six days, was begun on Monday, June 7, 1886, at 8.55 A. M., and ended on Saturday, June 12, 1886, at 6.44 P. M. The total running time was 61 hours, 6 minutes, or an average of 10 hours, 11 minutes per day. The shortest

Water actually evaporated per pound of dry coal from actual pressure and temperature,

8 48-100 lbs.

Equivalent water evaporated per pound of dry coal from and at 212° F.:

9 63-100 lbs. 9 25-100 lbs.

Including feed water heater, Excluding feed water heater,

^{*}The tests above referred to were made February 16th and 17th, 1887, with the following results:

time was 10 hours, 4 minutes on the 12th, and the longest 10 hours, 20 minutes on the 8th.

Observations were taken every 30 minutes of the counter, steam pressure at boiler and at engine, vacuum, water pressure, height of water in pump well, height of water in boiler, readings of meter and of air pump counter. All the temperatures were observed once an hour.

The results of the second test showed that the engine had performed a duty during the six days of 79,238,160, which is within less than one per cent. of the third contract requirement.

Thus, the first requirement was exceeded by 19 per cent., the second requirement was exceeded by 2 per cent., and in the third requirement there was a deficiency of less than 1 per cent.

In justice to the engine it should be stated that during the trial it was not convenient to subject the engine to a head of 132 feet *exclusive of friction* as required by the contract, but as in the opinion of the committee the duty of the engine would have been greater under this increased head, they felt justified in advising the acceptance of the engine.

The "slip" of the pumps, or the difference between the plunger displacement and the actual quantity of water pumped, was found by the weir measurements to vary from 1.42 to 1.94 per cent., which indicates a very satisfactory performance.

The detailed results of the observations will be found in a concise form in the tables annexed to this report.

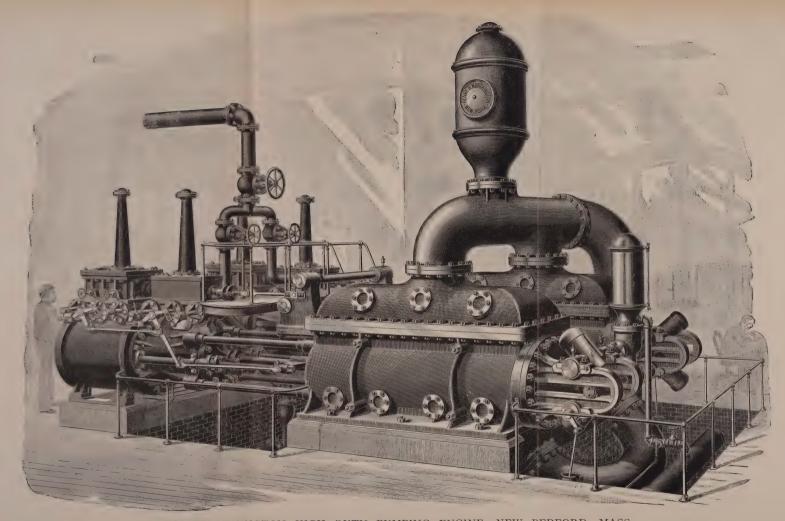
Respectfully submitted.

Signed, WILLIAM ROTCH,
R. C. P. COGGESHALL,
WILLIAM R. BILLINGS,
Committee

RECORD OF TWO DUTY TESTS OF ENGINE NO. 3 (WORTH-INGTON) AT THE NEW BEDFORD WATER WORKS.

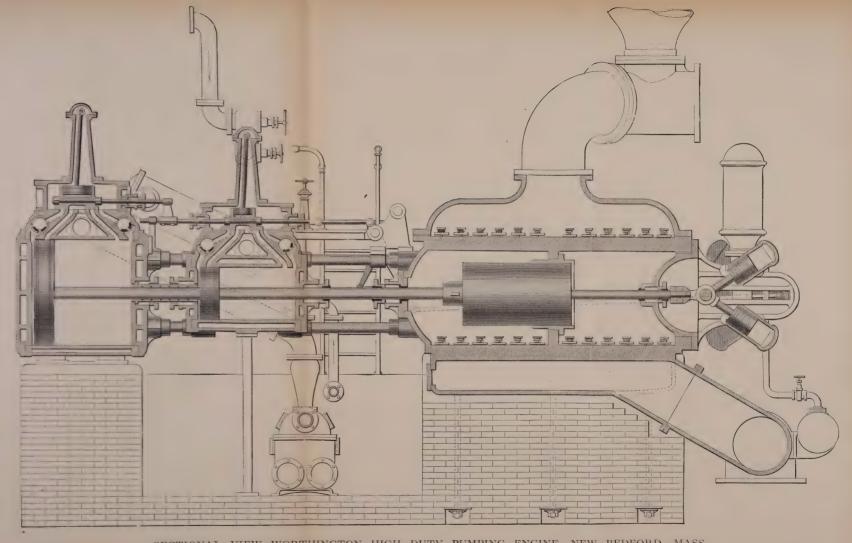
		FIRST TEST.	SECOND TEST.
7.	Date of trials,	June 1, 1886.	June 7-12, 1886
	Time of beginning trial,	12.00 м.	8.55 A. M.
	Time of ending trial,	12.05 A. M.	6.44 P. M.
	Duration of trial,	12 h. 5 m.	61 h. 6 m.
	Total counts ["revolutions"],	15,751	66,789
	Total strokes,	63,004	267,156
	Average strokes per minute,	86.9	72.9
	Total travel of plunger correspond-		
		3,276,208 inches.	13.892.112 in.
9.	Total observed shortage in travel	-,,	,,
	of plunger,	18.7 in.	795.4 in.
10.	Displacement of plunger for one		
	full stroke,	49.813275 gals.	49.813275 gals.
11.	Average displacement per stroke		
	during trials,	49.812706 gals.	49.807571 gals.
12.	Distance from gauge to water in	. 6	0
	pump well,	7.56 ft.	20.95 ft.
13.	Head above gauge,	110.22 ft.	109.85 ft.
	Total lift,	127.78 ft.	130.80 ft.
15.	Gallons pumped,	3,138,399	13,306,391
16.	Rate per 24 hours, gallons,	6,233,511	5,226,732
17.	Contract requirement in 24 hours,		
	gallons,	5,000,000	5,000,000
18.	Excess above contract requirement,	19 per cent.	4 per et.
19.	Temperature of water,	$65^{\circ}.12$	$67^{\circ}.55$
20.	Weight of water per cubic foot,	62.34 lbs.	62.33 lbs.
21.	Weight of water per gallon,	8.3337 lbs.	8.3323 lbs.
	Weight of combustible burned,	3.273 lbs.	
23.	Weight of coal burned,		18.302 lbs.
24.	Duty of engine P	\times V \times H	
		F	
	P	V	I
	49.812706×8.33	$\overline{37} \times 63,004 \times 127$.78
	First trial.	32.73	=102,108,759
		F	
	P	V I	I
			2.0
	Second trial. $= \frac{49.807571 \times 8.3323}{1000000000000000000000000000000000000$		$\frac{.80}{-} = 79,238,160$
		183.02 F	10,200,200
		Ľ	

25. Average pressure of steam in boil-		
ers,	114.69 lbs.	114.51 lbs.
26. Average pressure of steam in pipe		
near engine,	114.36 lbs.	114.01 lbs.
27. Average vacuum,	28.39 in.	28.46 in.
28. Average atmospheric pressure by		
barometer,	30.03 in.	29.86 in.
29. Average temperature of air in en-	W00 24	200 80
gine room,	$76^{\circ}.24$	83°.73
30. Average temperature of external	FOO EE	0=0 OF
air,	58°.77	65°.87
31. Average temperature of feed water	1790.04	1690.02
at entrance to heater,	179*.04	109*.02
32. Average temperature of feed water at exit from heater,	2310.08	2310.31
33. Average temperature of air pump	201 .00	201 .01
delivery,	830.60	850.06
34. Average temperature of steam at	00.00	00.00
boiler,	3700.96	3740.04
35. Average temperature of steam at	010 100	0,1 .01
engine,	3460.28	341°.28
36. Average temperature of gases in	010	011 100
flue before heater,	3610.40	360°.37
37. Average temperature of gases in		
flue after heater,	$259^{\circ}.80$	261°.58
38. Slip of pumps as tested by weir		
measurement,	Not observed.	1.70 per et.
39. Indicated horse power, mean of four		
eards,	153.70	
40. Indicated horse power, mean of two		
eards,		134,02
41. Horse power in water pumped, pump		
measurement, no allowance for		
"slip,"	135.15	120.02
42. Work done by pumps in per cent. of	XW-00	00.77
indicated H. P.,	87.93	89.55
43. Combustible burned per hour per	7 =0 17	
indicated H. P.,	1.76 lbs.	
44. Coal burned per hour per indicated H. P.,		2.24 lbs.
11. 1.,		2.24 108.



THE WORTHINGTON HIGH DUTY PUMPING ENGINE, NEW BEDFORD, MASS.





SECTIONAL VIEW WORTHINGTON HIGH DUTY PUMPING ENGINE, NEW BEDFORD, MASS.



1887—CITY DOCUMENT No. 4.

THIRTY-FIFTH ANNUAL REPORT

OF THE

TRUSTEES

OF THE

FREE PUBLIC LIBRARY

OF THE

CITY OF NEW BEDFORD, MASS.

NEW BEDFORD: MERCURY PUBLISHING CO., CITY PRINTERS. 1887.

OFFICERS OF THE FREE PUBLIC LIBRARY

FOR THE YEAR 1887

TRUSTEES.

Ex-officio. Terms expire January, 1888.

MORGAN ROTCH, Mayor of the City.

WILLIAM A. CHURCH, President of the Common Council.

WENDELL H. COBB, Chairman of the Committee of the City Council on Public Instruction.

Elected by the City Council.

GEORGE H. DUNBAR, GEORGE HOWLAND, JR., ISAAC B. TOMPKINS, MATTHEW C. JULIEN, ABRAHAM H. HOWLAND, JR., LEONARD B. ELLIS, Term expires April, 1887. Term expires April, 1887. Term expires April, 1888. Term expires April, 1888. Term expires April, 1889. Term expires April, 1889.

PRESIDENT OF THE BOARD.
THE MAYOR.

CLERK.

GEORGE H. DUNBAR.

COMMITTEES.

On the Library—The Mayor, George Howland, Jr., Cobb and Julien. On the Building—Messrs. Church, Tompkins and Ellis. On Binding and Blanks—Messrs. A. H. Howland, Jr., and Dunbar.

SUPERINTENDENT OF THE LIBRARY. GEORGE H. DUNBAR.

LIRRARIAN.

ROBERT C. INGRAHAM.

ASSISTANT LIBRARIAN.
WILLIAM L. R. GIFFORD.

ASSISTANTS.

JOSEPHINE A. MERRICK.

MARY E. BROWN,

SUSIE H. GAMMONS.

JANITOR.
YORICK W. AMES.

REPORT.

To the City Council of the City of New Bedford:

GENTLEMEN: The trustees of the Free Public Library submit the following report for the past year. The number of book deliveries, stated below, indicates that the public use of the library has been in some measure interfered with by the important changes which have been made during the year. The occupation of the new building involved the necessity of closing the library from June 22d to September 6th, as also for brief periods at other times. An effort was made to reduce the amount of interruption to the narrowest limits possible. But the work of construction and of moving of course prevented access to books for the times stated. We believe, however, that the beauty and convenience of the new building will more than repay the reading public for the temporary interruption, not only because of present advantages, but also for the opportunity which it offers for the increased future usefulness of the library.

During the year the books of fiction have been rearranged and the numbers changed, so that this demand may be more readily and conveniently met. A new system of general book delivery has also been adopted which it is believed will remedy many of the practical difficulties which have formerly existed. In future the dates of the delivery and of the return of a book will be stamped upon the card of the holder. It will be seen, therefore, that

it is important for readers to preserve these cards with care in order to prevent annoyance to themselves as well as to those in charge of the library. By this new system opportunity is given to furnish far more accurate tables of the statistics of the library than heretofore.

A new catalogue of fiction is now in course of publication, the advantages of which many readers will readily appreciate.

We again feel the necessity, for the sake of the thoughtless portion of the public who make use of this library, to emphasise the importance of care in the use of the books. The disfiguring of publications by marginal notes, and marks of any kind; as well as by their careless treatment, must be seen by any thoughtful person to be a misuse of a public trust.

STATISTICS 1886.

The new room was completed and opened to the public September 6th. The new registration began on the 20th. To the present time, January 1, 1887, sixteen hundred and twelve cards have been issued and four thousand four hundred and sixty-five volumes delivered. In this number of volumes no fiction is included, as the books in this department were not ready for delivery.

Prior to June 22d, eighteen thousand six hundred and sixty volumes were delivered for home use. Owing to the noise and confusion attending the work on the building there was a falling off in the number of visitors to the reading room. Many books had to be moved from their former position, and these with the new books which, for want of shelf room, were not located, became in a measure excluded from circulation. Consequently there is a marked decrease in the number of volumes delivered as compared with the number delivered during the same time in 1885.

Although the work had to be carried on under unfavorable conditions, it was thought best to keep the books in circulation until we were absolutely obliged to close, especially as the schools were in session and the books were wanted by the teachers and pupils in their school work.

Two thousand one hundred and thirty-five volumes have been added, one thousand eight hundred and twenty-one by purchase, and by gift, three hundred and fourteen volumes and three hundred and ninety-one pamphlets.

Number of newspapers on the table, thirteen; number of periodicals received, one hundred and eighty-five; number of volumes worn out and rejected, two hundred and thirty-eight; number of volumes bound, one hundred and forty-one; number of volumes rebound, two hundred and eighty-three. For books overdue, two hundred and seventy-two postals have been sent out. The whole number of books in the library at present is above fifty thousand, of which less than six per cent. are works of fiction.

GIFTS AND EXCHANGES.

In the appendix will be found a list of the gifts. Special mention should be made of a gift of the Vanderbilt House and Collection from Mr. George O. Crocker. Also of the gift, from the society, of the third volume of the Proceedings and Transactions of the Royal Society of Canada.

The serials that we have heretofore received from the American Antiquarian Society, the American Philosophical Society, Harvard College Library, the Boston Public Library, Mr. William H. Farrington and Mr. Gideon Nye, have been continued.

Mr. Thomas W. Cook has supplied us with Massachusetts Documents. Dr. Samuel A. Green and Mr. George E. Littlefield have added to our collection of local history.

Mrs. Susan Taber Thompson and the heirs of William C. Taber have given us collections of books, including publications of the Society of Friends and New Bedford pamphlets.

From the city of Boston we have received the publications of the record commissioners. Two hundred and twenty-six duplicate volumes of United States Documents have been sent to Washington, and others, helping to complete our set of the same, received in return. By another exchange nineteen volumes have been added.

APPENDIX.

FINANCIAL STATEMENT CONCERNING THE FREE PUBLIC LIBRARY FOR 1886.

STATEMENT OF THE LIBRARIAN.

and a	-	6.

1886.			
Jan. 1.	Cash on hand,	\$282.07	
	Amt. of Arber's bill,	40.00	
	Catalogues and Bulletins,	2.15	
	Fines,	186.36	\$510.58
	Paid for books,	\$36.56	
	Expressage, freight, jobbing,	28.50	
	Stationery,	35.29	
	P. O. box, and postage,	22.33	
	Binding and paper cutting,	8.35	
	Incidentals,	76.75	
	Insurance,	237.51	
1887, Ja	n. 1. Balance in hands of librarian,	65.29	\$510.58

FREE PUBLIC LIBRARY ACCOUNT.

1886, Jan. 1.	Bills approved Jan	uary,	\$366.81
- '	Feb	ruary,	391.68
	Mar	eh,	405.31
	Apr	il,	395.56
	May	,	367.81
	Jun	e,	410.96
	July	7,	364.56
	Aug	ust,	364.56
	Sep	tember,	439.06
	Oete	ober,	469.71
	Nov	ember,	402.75
	Dec	ember,	408.34

\$4,787.11

Balance transferred,		212.89	\$5,000.00
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1886, Jan. 1. Annual appropriation, # \$5,000.00

TRUST FUND ACCOUNT.

40			13	
	×	8	ИR	
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Jan. 1.	Sylvia Ann Howland fund,	\$11,807.21
	George Howland, Jr., fund,	214.53
	Charles W. Morgan fund,	361.17
	Oliver Crocker fund,	222.90
	James B. Congdon fund,	241.02
	Dog fund,	310.22 \$13,157.05

SYLVIA ANN HOWLAND FREE PUBLIC LIBRARY FUND.

1886.

Jan. 1.	Unexpended balance of income,	\$11,807.21
July 1.	Six months' interest,	1,500.00
Dec. 31.	Six months' interest,	1,500.00
	Amount returned,	4.36 \$14,811.57

Bills approved for books, periodicals, and binding, viz.:

January audit,	\$380.25	
February,	530.56	
March,	356.09	
April,	285.11	
May,	359.78	
June,	176.81	
July,	291.68	
August,		
September,	285.27	
October,	187.47	
November,	464.62	
December,	536.93	\$3,854.57

The detailed statement of the expenditures from the income of this fund is as follows:

Academy of Natural Sciences,	\$5.00
Allyn, John,	113.59
American Chemical Journal,	3.00
American Journal of Philology,	3.00
Appleton, D. & Co.,	64.80
Arber, Edward,	60.00
Baptist Review Association,	2.50
Bouton, J. W., Agent,	14.40
Bowen, George, Agent,	-5.50
Bowker, R. R.,	3.00
Carter, Rice & Go.,	16.50

Cassino, S. E. & Co.,	\$6.00
Clarke, Robert & Co.,	7.75
Coöperative Newspaper Society,	3.65
Cupples, Upham & Co.,	
Dawson, H. B.,	4.00
Dews, Edwin,	6.00
Dufossé, E.,	261.10
Ellis, George H.,	104.00 2.00
Essex Institute,	
Estes & Lauriat,	3.00 5.00
Fleischer, Carl F.,	
Fords, Howard & Hulbert,	9.70 12.50
Francis, David G.,	65.80
Ginn & Co.,	3.00
Griswold, W. M. (Q. P., Index,)	5.50
Harper, F. P.,	11.34
Harvard Monthly,	4.00
Hathaway, J. H., Treasurer,	130.60
Hickox, J. H.,	2.00
Houghton, Mifflin & Co.,	7.00
Howland, Franklyn,	9.00
Hutchinson, S.,	577.10
Inman, H. S., Agent,	60.00
Johns Hopkins University,	9.40
Kane, D. J. & Bro.,	63.10
Lawton, J. M., Jr.,	528.09
Lea, J. Henry,	1.97
Lewis, J. W. & Co.,	16.00
Library Bureau,	3.50
Little, Brown & Co.,	569.71
Littlefield, Geo. E.,	163.59
Luzerne Legal Register,	7.75
McDonough, Joseph,	14.00
Maine Historical and Genealogical Recorder,	3.00
Mass. Historical Society,	5.50
Mercury Publishing Co.,	6.00
Morgan, H. J.,	2.50
Morse, Geo. D.,	21.30
Munsell's Sons,	30.11
Narragansett Historical Publishing Co.,	2.00
Nash & Pierce,	34.02
Newport Historical Publishing Co.,	2.00
Noyes, Henry D. & Co.,	22.05
Osgood, E. L., Manager,	13.50
Parsons, John D., Jr.,	18.00

CITY	DOCUMENT	No. 4.	January,
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10

Polk, R.	L. & Co.,	\$5.00	
	W., Agent,	. 6,00	
	d, E. P.,	3.00	
Roffe, A	. H. & Co.,	203.30	
Sampson	a, Murdock & Co.,	14.00	
	of, Carl,	202.32	
Scribner	's Sons,	5.00	
	& Welford,	2.31	
	idge, J. C.,	5.75	
-	on, W. H. & Co.,	36.00	
Treat, E	,	25.00	
	tent Office,	46.80	
Weigel,		48.72	
Wilson,		12.00	
	rd, C. L.,	103.15	
Zahm, S	. н. & Со.,	7.80	\$3,854.57
1886.	GEORGE HOWLAND, JR., FUND.		
Jan. 1.	Unexpended balance of income,	\$214.53	
	One year's interest,	96.00	\$310.53
	CHARLES W. MORGAN FUND.		
1886.			
Jan. 1.	Unexpended balance of income,	\$361.17	
	One year's interest,	60.00	\$421.17
	, , , , , , , , , , , , ,		#
	OLIVER CROCKER FUND.		
\$434348			
1886.	TT 1 - 1 - 1		
Jan. 1.	Unexpended balance of income,	\$222.90	
	One year's interest,	60.00	
		\$282.90	
	George W. Tryon, Jr's bill,	40.00	\$242.90
.004	JAMES B. CONGDON FUND.		
1886. Jan. 1.	Haynandad balange of income	cm (1 0-)	
7an. 1.	Unexpended balance of income, One year's interest,	\$241.02	
	one year's interest,	30.00	
		\$271.02	
	Little Drawn & Cate Lill	10.05	2002/4/2 427

10.65 \$260.37

Little, Brown & Co's bill,

DOG FUND.

-1	0	0	C

Jan. Feb.	Unexpended balance, Received from county treasurer,	\$310.22 782.52

\$1,092.74

Paid Yorick W. Ames,

490.00 \$602.74

Total unexpended balance in the control of the Board of Trustees:

1887, Jan. 1.	Sylvia Ann Howland fund,	\$10,957.00
	George Howland, Jr., fund,	310.53
	Charles W. Morgan fund,	421.17
	Oliver Crocker fund,	242.90
	James B. Congdon fund,	260.37
	Dog fund.	602.74 \$12,794.71

GEORGE H. DUNBAR, Secretary.

GIFTS, 1886.

	Volumes.	Pamphlets
Akin, Eben, Jr., Fairhaven, Mass.,		1
American Antiquarian Society, Worcester, Mass.,		104
American Philosophical Society, Phil.,	1	2
Baker, Walter, & Co., 158 State street, Boston, Mass.	, 1	
Battell, Robbins and Miss Anna, Norfolk, Conn.,	1	
Bell, W. S., Chicago, Illinois,		1
Bostonian Society, Boston, Mass.,		1
Boston Municipal Government. Record Commission	-	
ers,	2	
Boston Public Library, Boston,		3
Bowditch, Wm. I., Boston,		1
Bradlee, Rev. C. D., Boston, Mass.,		4
Brookline Public Library, Brookline, Mass.,		1
Brooklyn Library, Brooklyn, N. Y.,	1	1
Brown, Mary E., City,		1
Brownell, T. Frank, New York City,		1
Buckminster, Joseph,		7
Buffalo Library, Buffalo, N. Y.,		1
Butler Hospital for the Insane, Providence, R. I., . '.		1
Butler, Rev. James, City,		2
Caccia, Susan Rodman, Florence, Italy,		1
Cannon, H. W., Washington, D. C.,		
Carney, Wm. H., City,		
Chase, Fredk., Hanover, N. H.,		1
Cincinnati Public Library, Cincinnati, Ohio,		10
City Library Association, Springfield, Mass.,		1
Clarke, Robert & Co., Cincinnati, Ohio,		
Commonwealth of Mass., Sec. of Com., Boston,		1
Commonwealth of Mass., State Library, Boston		1
Cook, Thomas W., City,		24
Cox, Wm. R., Washington,		1
Crapo, Wm. W., City,		
Crocker, Geo. O., City,		
Cutter, Abram E., Charlestown, Mass.,		1
Davenport Academy of Natural Sciences, Davenpor		
Iowa,		2
Dexter, Frank B., New Haven, Conn		3

Volum	es. Pamphlets.
Dunbar, Geo. H., 1 MS. 5	-
Eelectic Medical College, New York, N. Y.,	1
Eddy, Abram T., City,	
Emery, Wm. M., Bowdoin College, Brunswick, Me., 1	
Essex Institute, Salem, Mass.,	1
Evans, Fredk. W., Hancock, Mass.,	
Farrington, Wm. H., Murray street, N. Y.,	13
Fessenden, C. B. H., City, 39 Stereoscopic Views 1	3
Fletcher Free Library, Burlington, Vt.,	1
Forbes, Robert B., Boston, Mass., 1	2
Franklin Institute, Philadelphia, Pa.,	1
Friends Free Library, Germantown, Pa.,	1
General Society of Mechanics and Tradesmen, New	
York City,	1
Georgia Historical Society, Savannah, Ga.,	ı 1
Gibson, A. M., New York City,	
Green, Dr. Samuel A., Boston, Mass.,	22
Hamilton, M. R., State Librarian, Newark, N. J., 1	
Hammond, Rev. Wm. B., Rome, N. Y., 1	
Harrower, Henry D., New York City,	1
Hartford Library Association, Hartford, Conn.,	3
Harvard College, Cambridge, Mass., 2	3
Hazen, Rev. Henry A., Congregational House, Boston, 1	*
Heirs of Wm. C. Taber, City, 103	
Hill, Miss L. A., Belmont, Mass.,	2
Howland, George, Jr., City,	1
Jones, Augustine, Providence, R. I.,	1
Knowlton, Hosea M., City,	1
Laneaster Library Committee, Laneaster, Mass.,	1
Lawton, Jas. M., Jr., City,	
Lee, Leslie A., Brunswick, Me.,	2
Library Company, Philadelphia, Pa.,	2
	1 1
Littlefield, Geo. E., 67 Cornhill, Boston,	16
Lynn Public Library, Lynn, Mass.,	1
McDonnell Bros., Chicago, Illinois,	2
Maimonides Library, New York,	2
Mercantile Library, New York City,	3
Mercantile Library Company, Philadelphia, Pa.,	1
Merrill, Edw. B., 56 Wall street, New York,	5
Middlesex Mechanics Association, Lowell, Mass.,	. 1
New Bedford City Government,	
New England Hist. Gen. Society, Boston, Mass.,	1
New Jersey State Government, Trenton, N. J., 1	

	Volumes.	Pamphlets
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Newton Free Library, Newton, Mass.,		1
New York Free Circulating Library, New York City, .		1
Northampton Lunatic Hospital, Northampton, Mass.		1
Nye, Gideon, Jr., Canton, China,		1
Ohio State Government, Columbus, Ohio,		
Omaha Public Library, Omaha, Neb.,		1
Peabody Institute, Baltimore,		
Peabody Institute, Peabody, Mass.,		1
Perkins Institution for the Blind, Boston, Mass.,		1
Philadelphia Apprentices lib. comp. Philadelphia, Pa.		1
Providence Public Library, Providence, R. I.,		1
* '		1
Provident Life and Trust Comp., Philadelphia, Penn.		1
Public Library, Chicago, Illinois		1
Public Library, Chicago, Illinois,		1
Publishers of the Advocate of Peace,		
Publishers of the American Lithographer and Printer		
Publishers of the Folio,		
Publishers of the Manifesto,		
Publishers of the Signs of the Times,		
Redwood Library and Athenæum, Newport, R. I.,		
Regents of Smithsonian Institution, Washington,		
Richards, Ellen H., Boston,	. 1	
Rodman, Edmund, City,		1
Rodman, Thos. R., City,		1
Rogers, Henry H., Manufacturing Co., New York,	. 1	
Royal Society of Canada, Montreal, Canada,	. 1	
St. Louis Public Library, St. Louis, Mo.,	•	1
San Francisco Mercantile Library Association, Sa	n	
Francisco, Cal.,	•	1
Sauveur, L., Oswego, N. Y.,		1
Smiley, Rebecca, City,		
Smithsonian Institution, Washington, D. C.,		
Snow, Rev. Chas. A., Taunton, Mass.,		1
Sullings and Kingman, City,		1
Swansea Public Library, Swansea, Wales,		2
Taunton Public Library, Taunton, Mass.,		1
Thompson, Susan T., City,		61
Thomson, John H.,		2
Tillinghast, Wm. H., Cambridge, Mass.,	•	1
	•	
Tophan, Wm. B.,		4
Tripp, Sarah W.,	. 1	
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- Bureau of Education,	. 2	3

	Volumes.	Pamphlets.
- Department of Interior,	94	4
— Engineer Department,		
- Patent Office,		3
- Treasury Department,		
- War Department, 14 Chart		
United States Civil Service Commission, Washington	,	1
University of Vt. and State Agricultural College, Bur	-	
lington, Vt.,	1	
Upton, Winslow, Providence, R. I.,		1
Utica City Library, Utica, N. Y.,		1
Warren, Gen. Lucius H., Philadelphia, Pa.,	1	
Watertown Free Public Library, Watertown, Mass.	,	1
Willey, Henry, City,	1	-4
Williams, J. Fletcher, St. Paul, Minnesota,		2
Williamson & Co., Toronto, Canada,	1	
Wilmington Institute, Wilmington, Del.,		1
Wilson, Edw. L., New York City,	1	
Woburn Public Library, Woburn, Mass.,		1
Worcester Free Public Library, Worcester, Mass., .		1
Worth, Benj., City,		•)
Wright, Carroll D., Boston, Mass.,	2	



ANNUAL REPORT

OF THE

CHIEF ENGINEER

OF THE

FIRE DEPARTMENT

OF THE CITY OF NEW BEDFORD,



FOR THE YEAR ENDING DECEMBER 31, 1886.

FREDERICK MACY, Chief Engineer.

NEW BEDFORD: MERCURY PUBLISHING CO., CITY PRINTERS. 1887.



Committee of the City Council

ON

FIRE DEPARTMENT,

1886.

Aldermen,

EDWARD T. PIERCE,

Residence 103 Spring street.

EDWIN DEWS,

Residence Orchard and Washington sts.

Councilmen,

CHARLES A. CASE,

Residence 363 Purchase street.

ANDERSON H. SWIFT,

Residence 74 South street.

MICHAEL DUGAN,

Residence 82 South Second street.

Engineers' Department.

Chief Engineer,

FREDERICK MACY,

Residence 234 Acushnet avenue.

First Assistant Engineer,

MICHAEL F. KENNEDY,

Residence 139 Acushnet avenue.

Second Assistant Engineer,

LORING T. PARLOW,

Residence 5 North street.

Third Assistant Engineer,

PLINY B. SHERMAN,

Residence 433 Acushnet avenue.

Fourth Assistant Engineer,

AUGUSTUS A. WOOD,

Residence 46 Hill street.

Clerk of Board of Engineers,

LUTHER G. HEWINS, JR.,

Residence 762 County street,

REPORT.

FIRE DEPARTMENT OFFICE,
CITY HALL, NEW BEDFORD,
December 31st, 1886.

Gentlemen: In compliance with the requirements of the city ordinance governing the Fire Department of the city of New Bedford, I herewith submit to you my tenth annual report of the doings and condition of the department for the year ending December 31st, 1886, together with a list of the members, with their rank, number of badge, age, residence and occupation; location of fire alarm signal boxes, and distribution of keys to same; a statement of receipts and expenditures; fires and alarms; loss and insurance, as near as could be ascertained; location of hydrants and reservoirs; inventory of property in possession of the department; and such suggestions as I think may be of interest to you.

Everything in the department has run along about as usual. We have had no very disastrous fires and although our aggregate loss has been somewhat larger than the previous year, it is very small when we consider the size of our city, the amount of risk and the large number of combustible buildings constantly being erected. The members of the department have been very prompt in responding to all alarms and have performed the duties required of them in a most satisfactory manner. The companies have all very competent officers and the men are under the best of

discipline and I think I can safely say that the department was never in so good condition. The members all work in harmony and are always ready to assist each other at fires whether their own apparatus responds or not, and they all seem interested in keeping our losses down to the smallest possible amount. I cannot speak too highly of the service rendered by the telephone company during the vear in giving us quick alarms, for it has been a great saving in wear and tear of apparatus, as on a telephone alarm only one piece of apparatus responds, while if a box is pulled it calls out five or six. I am happy to say that during the year no injury has befallen any member while in the discharge of his duty. Charles A. Gifford, a member of Engine Co. No. 9, died Septemper 15. funeral expenses were paid by the Firemen's Beneficial Society, and the balance of the assessment, \$97, was paid to his family. This makes the third death in the department since this society was formed. Sarah Howard, age 48, colored, was so severely burned at a fire February 6, that she died soon after being removed from the building.

In my last annual report I brought to your attention the very urgent need of a hook and ladder and hose house at the north end and was pleased to find that your views coincided with mine. We now have a building nearly completed which will be ornamental as well as useful in that part of the city and a credit to your administration. I hope the incoming government will equip it with as little delay as possible, as it is in a large and combustible district, and constantly growing more so. During the year there was a petition from Hon. Alanson Borden and others that some provision be made for the protection from fire of the property in the northwest section of the city, but the committee thought that as they had one building under way it was all that should be done in one year; but I feel that the

time is not far distant when something will have to be done to protect the large number of dwellings constantly being erected in that section, and I would recommend that the incoming city government give it their early attention. There is another matter I would call their attention to and that is, our water supply on Acushnet avenue as far as the Head of the River; several times within a few years we have been called there, to find ourselves crippled for the want of water. As there is considerable valuable property there it does seem as though there should be some means provided for its protection.

FORCE OF THE DEPARTMENT.

The force of the department consists of one chief and four assistant engineers and clerk, thirteen men permanently employed, and one hundred and thirty-two call members, making a total of one hundred and fifty-one men.

APPARATUS.

The apparatus consists of eight steam fire engines (five in commission and three in reserve ready for immediate use), one hand engine stationed at the Head of the River, four two-wheeled and five four-wheeled horse hose carriages (three of the two-wheeled ones in reserve), two hook and ladder trucks (one in reserve and stationed at the coal depot on Elm street), three sleigh reels, six exercise and coal wagons, and one telegraph wagon, all in good repair, except the old Numbers Three and Four, which are too old to be reliable, and I would recommend that some action be taken as early as possible in relation to them. I hardly think it would be economy to repair them, for they need so much it would cost nearly as much as new ones, and then they would be too heavy and cum-

bersome. I would recommend that they be disposed of to the best advantage, and a new one purchased.

The Number One engine has been to Manchester, N. H., and had an entire new boiler and been otherwise repaired, so that she is in every way equal to a new engine.

HOUSES.

The engine houses are in good order, considerable having been done the past year, and I know of no very heavy outlay required except the floor of the Central engine house.

HORSES.

There are twenty-one horses belonging to the depart ment, four having been bought and three sold during the year, and with one exception they are all in good condition.

HARNESSES.

There are nine sets of double and eight single harnesses in the department all in good condition.

HOSE.

There is about eleven thousand feet of cotton rubber lined hose in the department, nearly all in good condition, which I think will be sufficient unless we add more apparatus.

WATER SUPPLY.

The number of hydrants January 1, 1886, was three hundred and sixty-seven (367). Added during the year

twenty (20), making a total of three hundred and eighty-seven (387).

There are thirty-three (33) reservoirs. The covering stones to the large one on Pleasant street north of Max-field were discovered to be broken and had to be repaired at quite a heavy outlay. If this department is to have the care of, and keep in repair all of the reservoirs in the city, I would recommend that a small appropriation be made each year for that purpose. The large square iron covers in the side walk should be removed and replaced by small round ones, as we have had many complaints of persons falling on them, as they get worn very smooth and a slight fall of snow on them makes them very dangerous.

FIRE ALARM.

This branch of the department has worked very well during the year and so I have no complaints to make, but, as I have stated in my former reports, we are fast outgrowing our present system; our circuits are constantly growing larger and more overloaded, and since we have so many telegraph, telephone, and electric light wires stretched in all directions it is in the nature of things that we should have more trouble with our line than formerly, and a slight trouble on one of our circuits leaves a large section of the city exposed. What we need is a new set of repeaters and to make our circuits smaller. There have been no boxes added the past year, but it will be necessary to put in a few during the coming year.

We have twenty-five miles of wire, eight bell strikers, fifty-one signal boxes, seven fifteen inch engine house gongs, seven seven inch engineer's gongs, and three small tappers, operated by a battery of one hundred and forty-seven cups.

PROTECTIVE DEPARTMENT.

There has been considerable work for this branch of the department during the year. There has been a large number of covers spread and therefore much property saved and the members deserve credit for their promptness and good work done.

RECEIPTS AND EXPENSES.

Appropriat	tion for	1886,
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\$28,000.00

Cash received and paid to city treasurer, as follows:

For sale of coal,	\$20.35	
For pumping,	25.00	
For sale of old hose,	25.00	
For sale of old materials,	3.25	
For sale of manure, city farm,	245.99	319.59
Transfer from unappropriated fund,		2,000.00
Transfer to balance account,		170.41

MONTHLY AUDITS.

January,		\$1,763.10	
February,		1,793.42	
March,		2,389.04	
April,		2,557.39	
May,		2,803.65	
June,		3,618.14	
July,		2,806.66	
August,		3,113.41	
September,		2,104.68	
October,		1,888.05	
November,		2,186.14	
December,	t	3,466.32	
		\$30,490.00	\$30,490.00

CONCLUSION.

To his honor the mayor and gentlemen of the city council for their many acts of kindness, to the assistant engineers for their support, and to the officers and members for their promptness, I return my most sincere thanks.

FREDERICK MACY, Chief Engineer.

STATEMENT OF EXPENDITURES.

STATEMENT No. 1.

Expenditures of the Board of Engineers for the Year 1886.

Pay-roll board of engineers,	\$1,520.00
Stationery,	6.75

\$1,526.75

STATEMENT No. 2.

EXPENDITURES OF FIRE ALARM FOR THE YEAR 1886.

Pay of assistant superintendent,	\$499.98
Supplies,	119.92
Wire,	17.60
Hay,	40.10
Grain,	53.64
Labor,	29.75
	-

\$760.99

STATEMENT No. 3.

RUNNING EXPENSES OF COMPANIES FOR THE YEAR 1886.

Company pay-rolls,	\$5,876.02
Permanent men's pay-rolls,	11,031.00
Hay and straw,	1,622.57
Grain,	741.60
Shoeing and blacksmithing,	417.74

Harnesses and repairs,	\$198.01
Wood and coal,	440.28
Gas,	502.67
Electric lights,	156.89
Engine and wagon repairs,	1,651.87
Incidentals,	60.29

\$22,698.94

STATEMENT No. 4.

INCIDENTAL AND SUPPLY ACCOUNT FOR THE YEAR 1886.

Advertising and printing,	\$29.50
Rent,	85.00
Labor, spare drivers, etc.,	485.28
Horse hire,	334.00
New hose and repairs,	1,071.77
Telephones and rent of same,	350.00
Horses,	900.00
Freight and carting,	62.81
Repairs on reservoirs,	256.16
Sundries,	1,013.73

\$4,588.25

STATEMENT No. 5.

Expenditures of the New Bedford Protecting Society for 1886.

Pay-roll,	\$150.00
Supplies,	15.00

\$165.00

STATEMENT No. 6.

REPAIRS OF BUILDINGS FOR THE YEAR 1886.

Repairs on Onward No. 1 house,	\$132.87
Repairs on Central Engine House,	45.73
Repairs on C. Howland No. 4 house,	41.79
Repairs on Z. Hillman No. 5 house,	456.38
Repairs on F. Macy No. 6 house,	73.30

\$750.07

STATEMENT No. 7.

Total Expenditures of the Fire Department for the Year 1886.

Expenditures of the board of engineers, as per Statement No.1,	\$1,526.75
Expenditures of fire alarm, as per Statement No. 2,	760.99
Running expenses, as per Statement No. 3,	22,698.94
Incidentals and supplies, as per Statement No. 4,	4,588.25
Expenditures of Protecting Society, as per Statement No. 5,	165.00
Repairs on buildings, as per Statement No. 6,	750.07

\$30,490.00

FIRE DEPARTMENT ROLL.

ONWARD STEAM FIRE ENGINE CO., No. 1.

House on Purchase street, foot of Franklin street. Engine built by Amoskeag Manufacturing Co., Manchester, N. II.; capacity 500 gallons per minute; weight of engine, as drawn to fires, 6950 lbs.; weight of hose carriage, with 1050 feet of Boyd's cotton hose, 2850 lbs.; put into service Aug. 26, 1869. Company organized Jan. 1, 1870.

Date of Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Apr. 29, 1873.	8	Allen W. Tinkham,	Foreman.	32	30 County ave.	Carpenter.
June 15, 1876.	17	George A. Tripp,	1st Asst.	38	63 Foster st.	Clerk.
Apr. 24, 1882.	6	Edward M. Durfee,	2d Asst.	41	199 Pleasant st.	Blacksmith.
Dec. 30, 1871.	9	E. C. Milliken,	Clerk.	43	437 Purchase st.	Baker.
Jan. 27, 1873.	7	Julian A. Sweet,	Hoseman.	37	State & Franklin.	Roll Coverer.
May 31, 1880.	14	Charles A. Wilson,	66	30	111 Campbell st.	Carpenter.
May 7, 1883.	11	F. W. Brightman,	66	28	547 Purchase st.	Paint manuf.
Apr. 28, 1884.	12	Nelson J. Stone,	66	33	Park st.	Horse Trainer.
Oct. 27, 1884.	16	Edgar F. Tripp,	66	35	344 Pleasant st.	Copper Worker.
Dec. 29, 1884.	19	John Whitehead,	66	42	363 Pleasant st.	Sawyer.
Jan. 26, 1885.	15	James F. Powers,	- "	33	102 Merrimac st.	Machinist.
Aug. 31, 1885.	10	Wm. O. Brightman,	66	34	83 Austin st.	Painter.
Apr. 1, 1885.	18	Roland A. Hatch,	Torch.	20	Purchase & High.	Clerk.
Sept. 1, 1885.	13	John T. Aghen,	6.6	24	12 Willis st.	66
Mar. 7, 1884.	20	Fred'k H. Wood,	Engineer.	26	Engine house.	Engineer.
Dec. 30, 1871.	21	James L. Bryant,	Driver.	48	66	Hostler.
Apr. 10, 1885.	23	Isaac Dawson,	Reel driver	21	593 Purchase st.	Teamster.
Apr. 1, 1884.	22	Harris N. Tinkham,	Stoker.	28	74 Parker st.	Blacksmith.

PROGRESS STEAM FIRE ENGINE CO., No. 2.

House corner Purchase street and Mechanics lane. Engine built by the Amoskeag Manufacturing Co., Manchester, N. H.; capacity 500 gallons per minute; weight of engine, as drawn to fires, 7000 lbs.; weight of hose carriage, with 1050 feet Boyd's cotton hose, 2850 lbs.; put in commission Nov. 6, 1884. Company organized Oct. 27, 1860.

Date of	f Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Oct.	7, 1878.	30	George M. Crapo,	Foreman.	36	48 No. Second st.	Frame Maker.
Nov.	1, 1862.	25	John Downey,	1st Asst.	49	72 No. Second st.	Teamster.
July	3, 1876.	32	Charles F. Dean,	2d Asst.	31	59 Elm st.	Carriage
Aug.	20, 1874.	27	James D. Allen,	Clerk.	50	202 Purchase st.	Painter. Clerk.
Jan.	1, 1872.	29	James G. Harding,	Hoseman.	52	62 State st.	Carpenter.
Jan.	1, 1872.	28	Edw. C. Spooner,	.66	52	58 No. Sixth st.	Teamster.
Jaly	6, 1874.	26	E. R. Leverett,	46	33	188 Middle st.	Clerk.
Nov.	1, 1875.	31	Allen T. Kendrick,	6.6	34	96 Washington st.	Merchant.
July	3, 1876.	34	Moses Dean,	66	33	202 Purchase st.	Blacksmith.
June	2, 1879.	33	Wm. R. Sherman,	66	35	161 William st.	Merchant.
May	5, 1884.	36	Saml. W. Mitchell,	6.6	28	31 Mill st.	Boat Builder.
May	11, 1885.	35	Wm. K. Wagner,	66	30	44 Pleasant st.	Telephone
Jan.	6, 1886.	37	E. Kempton Pierce,	Torch.	25	19 Mill st.	Inspector. Shoemaker.
May	5, 1884.	24	Wyman D. Jacobs,	66	21	59 Elm st.	Clerk.
Apr.	4, 1876.	38	George B. Russell,	Engineer.	54		Engineer.
May	1, 1871.	39	William P. Soule,	Driver.	54	303 Acushnet ave.	Hostler.
July	16, 1876.	41	Michael Conway,	Reel driver	48	8 Walnut st.	4.6
Aug.	20, 1874.	40	Lemuel W. Hayes,	Stoker.	43	18 Hillman st.	Wood Turner.

CORNELIUS HOWLAND STEAM FIRE ENGINE CO., No. 4.

House corner Sixth and Bedford streets. Engine built by the Amoskeag Manufacturing Co., Manchester, N. H.; capacity 500 gallons per minute; weight of engine, as drawn to fires, 7000 lbs.; weight of hose carriage, with 1050 feet Boyd's cotton hose, 2850 lbs.; put in service May 20, 1884. Company organized Feb. 1, 1867.

Date of Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Dec. 10, 1877.	42	Edgar S. Gilbert,	Foreman.	39	27 Fifth st.	Painter.
Aug. 28, 1882.	45	Saml. Watson, 2d,	1st Asst.	29	37 "	Grocer.
Jan. 31, 1881.	44	Chas. S. Wing,	2d Asst.	32	118 So. Sixth st.	Grocer.
Oct. 24, 1875.	50	Wm. A. Gibbs,	Clerk.	36	73 Forest st.	Cabinet Maker.
Jan. 29, 1867.	46	James M. Tripp,	Hoseman.	51	211 Acushnet ave.	Carpenter.
Jan. 29, 1867.	43	Hugh McDenald,	61	43	6 Bethel st.	Blacksmith
Jan. 27, 1873.	49	John H. Backus,	46	35	N. Water & Elm.	66
Dec. 6, 1877.	47	Chas. H. Card,	66	38	73 Forest st.	Painter.
Nov. 10, 1879.	53	Benj. F. Hinckley,	66	30	73 So. Sixth st.	Printer.
Oct. 27, 1884.	51	Roland W. Snow,	66	51	109 Fourth st.	Painter.
Aug. 31, 1885.	48	James J. Denaghy,	6.6	22	91 Washington st.	Machinist.
July 26, 1886.	52	Wilson A. Tripp,	66	21	47 Bedford st.	66
Aug. 31, 1885.	55	Daniel J. McDonald,	Torch.	24	96 So. First st.	Blacksmith
July 26, 1886.	54	Wm. E. Watson, Jr.,	66	22	37 Fifth st.	Clerk.
Jan. 29, 1867.	56	Dani. D. Briggs.	Engineer.	48	48 Bedford st.	Machinist.
Apr. 29, 1878.	58	Alonzo V. Jason,	66	32	Engine House.	66
Jan. 29, 1867.	57	Geo. H. W. Tripp,	Driver.	51	66	Hostler.
Apr. 1, 1884.	59	Horace D. Bradley,	Reel driver	35	County & Allen sts.	Painter.

ZACHARIAH HILLMAN STEAM FIRE ENGINE CO., No. 5.

House corner of County and Hillman streets. Engine built by Messrs. Clapp & Jones, Hudson, N. Y.; capacity 500 gallons per minute; weight of engine, as drawn to fire, 7250 lbs.; weight of hose carriage, with 1050 feet Boyd's cotton hose, 2850 lbs.; put into service Dec. 13, 1873. Company organized Dec. 13, 1873.

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Date of Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Jan. 29, 1883.	60	Charles C. Gifford,	Foreman.	41	151 North st.	Carpenter.
Feb. 1, 1884.	68	Squire A. Glfford,	1st Asst.	30	95 Hillman st.	Teamster.
May 5, 1884.	72	George H. Cook,	2d Asst.	24	146 Hillman st.	Clerk.
July 1, 1880.	69	Jerry B. Taber,	Clerk.	26	13 N. Emerson st.	Carriage Maker.
Feb. 28, 1881.	67	E. R. Bentley,	Hoseman.	60	80 Kempton st.	Carpenter.
May 1, 1876.	64	Geo. H. Chadwick,	66	52	163 Kempton st.	Painter.
Dec. 13, 1873.	62	Isaiah H. Wilcox,	66	51	9 Campbell st.	66
Jan. 29, 1883.	70	Martin S. Nelson,	66	30	12 Pope st.	Clerk.
May 23, 1886.	61	Henry C. Stubbs,	66		146 Kempton st.	Painter.
May 25, 1885.	66	Charles H. Brown,	66	31	Kempton st.	Teamster.
June 1, 1885.	71	Andrew T. Allen,	66	24	97 Smith st.	Jobbing.
July 27, 1885.	65	John F. Gifford,	66	32	169 Kempton st.	Teamster.
Feb. 23, 1885.	73	Arthur W. Forbes,	Torch.	19	151 North st.	Clerk.
Oct. 1, 1885.	63	Joseph Forbes,	66	20	Cedar st.	Shoemaker.
Dec. 13, 1873.	74	M. Blanchard, Jr.,	Engineer.	43	Engine house.	Engineer.
Jan. 7, 1876.	75	B. F. King, Jr.,	Driver.	46	44	Hostler.
May 1, 1882	76	Charles Jones,	Stoker.	34	46	Wood
July 13, 1875.	77	Reuben Taber,	Reel driver	31	14 Spruce st.	Turner. Hostler.

FREDERICK MACY STEAM FIRE ENGINE CO., No. 6.

House on Fourth street, head of Potomska street. Engine built by Amoskeag Manufacturing Co., Manchester, N. H.; capacity 500 gallons per minute; weight of engine, as drawn to fires, 7100 lbs.; weight of hose carriage, with 1050 feet Boyd's cotton hose, 2850 lbs.; put into service Nov. 1, 1882. Company organized Oct. 31, 1882.

Date of Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Oct. 31, 1882.	121	George W. Parker,	Foreman.	35	135 Washington st.	Bookkeeper.
66	127	Thomas Wood,	1st Asst.	40	117 Grinnell st.	Photograph'
66	125	Marshall S. Greene,	2d Asst.	32	Rivet near Crapo.	Mason.
4.6	122	Herbert B. Gardner,	Clerk.	40	114 Washington st.	Compositor.
Mar. 29, 1883.	128	Joseph Jackson,	Hoseman.	31	3 Waverly st.	Barber.
Oct. 31, 1882.	131	Charles R. Cornell,	66	29	Fifth st., cor. of	
66	132	Jason L. Ballou,	66	41	41 Rockland st.	Keeper Carpenter.
"	133	Charles K. Wood,	6.6	35	87 Acushnet ave.	Passepartou Maker
Nov. 16, 1886.	130	Edward W. O'Neil,	66	26	6 Thompson st.	Glass Cutter
May 8, 1884.	126	Robert N. Allen,	6.6	43	4 Thompson st.	Painter.
June 22, 1885.	124	Jas. H. Sherman,	66	38	234 County st.	Machinist.
Nov. 24, 1885.	123	Henry M. Mosher,	4.6	38	205 County st.	6.6
Oct. 31, 1882.	134	Frank Greene,	Torch.	21	81 Acushnet ave.	Teamster.
66	135	Frederick Nelson,	66	20	200 So. Second st.	Blacksmith.
**	137	Charles G. Taber,	Engineer.	38	Engine house.	Engineer.
**	138	Edward Dugan,	Driver.	47	46	Hostler.
Nov. 10, 1886.	142	Benjamin Groves,	Stoker.	31	284 Fourth st.	Machinist.
Oct. 31, 1882.	136	N. Herbert Greene,	Reel driver	29	91 Acushnet ave.	Grocer.

FRANKLIN HOSE CO., No. 1.

House corner Purchase street and Mechanics lane. Carriage built by the Amoskeag Manufacturing Co., Manchester, N. H.; weight of carriage and 900 feet vulcanized rubber hose, 2790 lbs.; put into service Jan. 1, 1872. Company organized Dec. 31, 1871.

Date of Joining.	Badge	Name.	Rank.	Age.	Residence.	Occupation.
Dec. 6, 1873.	82	David W. Howland,	Foreman.	50	227 Acushnet ave.	Blacksmith.
Nov. 26, 1877.	84	Danl. H. Burns,	1st. Asst.	44	157 Union st.	Boiler Maker
Mar. 6, 1885.	79	Chas. T. Maxfield,	2d Asst.	22	141 Middle st.	Printer.
Jan. 1, 1873.	81	Jas. S. Hathaway,	Clerk.	56	496 Acushnet ave.	Shipwright.
May 1, 1875.	80	Henry R. Meigs,	Driver.	37	311 Purchase st.	Hostler.
Sept. 12, 1881.	85	A. B. C. Davenport,	Hoseman.	38	95 Hillman st.	Boiler Maker
May 6, 1886.	83	Saml. C. King,	44	25	427 Acushnet ave.	Painter.
Dec. 1885.	78	A. G. Mitchell,	66	28	101 N. Second st.	Painter.
Nov. 24, 1884.	67	Wm. H. Maxfield.	Torch.	20	141 Middle st.	Clerk.

PIONEER HOOK AND LADDER CO., No. 1.

House corner of Purchase street and Mechanics lane. Carriage built by Joseph T. Ryan, of Boston; put into commission Aug. 4, 1877.

Date of Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Jan. 30, 1870.	87	Lysander W. Davis,	Foreman.	54	106 Chestnut st.	Carpenter.
Aug. 5, 1865.	102	Chas. J. Johnson,	1st Asst.	55	23 Locust st.	Spar Maker.
Mar. 29, 1869.	88	James Conway,	2d Asst.	48	171 Fourth st.	Teamster.
Mar. 31, 1874.	89	Charles E. Pierce,	Clerk.	39	16 Morgan st.	Printer.
Feb. 5, 1884.	98	Chas. B. Allison,	Ladderm'n	31	50 Hillman st.	Hackman.
Aug. 1, 1879.	96	Nathl. H. Caswell,	Axeman.	39	500 Acushnet ave.	Blacksmith.
Jan. 10, 1874.	97	James W. Dugan,	Ladderm'n	32	85 So. Second st.	Teamster.
June 6, 1884.	93	Charler H. Delano,	66	24	96 No. Second st.	Mechanic.
June 2, 1880.	103	Alfred M. Gifford,	66	23	Willis st.	Decorator.
June 24, 1883.	105	Edw. D. Francis,	66	31	26 Kempton st.	Shoemaker.
Oct. 30, 1882.	104	Henry C. Gidley,	66	25	112 Kempton st.	6.6
Nov. 24, 1879.	94	Chas. M. Hathaway,	66	43	33 North st.	Teamster.
Aug. 25, 1884.	91	Edw. F. Jennings,	66	47	101 Middle st.	66
July 1, 1885.	95	Chas. P. Johnson,	66	28	112 Kempton st.	Wood
Oct. 26, 1863.	90	A. R. Luscomb,	Axeman.	47	259 Pleasant st.	Turner. Laborer.
May 24, 1886.	99	A. V. Landers,	Ladderm'n	43	268 Purchase st.	Shoemaker.
Sept. 25, 1882.	100	Philip C. Russell,	66	24	19 Walnut st.	Laborer.
Feb. 5, 1884.	101	Frank Spooner,	4.6	30	72 So. Second st.	Painter.
Aug. 7, 1863.	86	Philip M. Tripp,	66	47	Cor. Hillman st. &	Teamster.
July 26, 1880.	92	Clarfaus Vansant,	46	48	Acushnet ave. 17 Maxfield st.	Blacksmith.
Sept. 21, 1881.	106	William A. Hamer,	Torch.	20	78 Middle st.	Printer.
Dec. 1, 1886.	107	Wm. R. Russell,	"	20	19 Walnut st.	Ornamenter.
Feb. 1, 1875.	108	Lewis G. Allen,	Driver.	63	Cor. Pleasant and Mill sts.	Hostler.

HANCOCK ENGINE CO., No. 9.

House located at Acushnet. Engine built by John Agnew of Philadelphia, in 1843. Engine removed to Acushnet Jan. 18, 1861, and a company was organized to man her at that time. Company reorganized Dec. 14, 1878.

Date of	Joining.	No. of Badge	Name.	Rank.	Age.	Residence.	Occupation.
Dec. 1	4, 1878.	146	John A. Russell,	Foreman.	37	Acushnet ave.	Farmer.
May	7, 1883.	147	Francis P Wash-	1st Asst.	43	66	Carpenter.
Dec. 1	4, 1878.	154	Joseph W. Spooner,	2d Asst.	34	46	Peddler.
6	6	165	Allen Russell, Jr.,	Clerk.	29	66	Grocer.
(149	John Silvia,	Suct. hose.	49	Belleville road.	Shoemaker.
May	1, 1882.	159	Israel Peckham,	66	44	Tarkiln Hill road.	Blacksmith.
Dec. 1	14, 1878.	153	Wm. T. Gifford,	Leading Hose.	39	Mill road.	Farmer.
	66	160	Herbert M. Spooner,		29	Acushnet ave.	Box maker.
Sept.	3, 1883.	151	John G. Whalon,	66	25	66	6.6
Dec. :	14, 1878.	148	Andrew B. Grinnell,	44	47	Mill st.	Grocer.
	6.6	152	Jr., Jas. A. Wilbur,	Steward.	41	66	Barber.
	44	157	Geo. W. Randall,	Brakeman.	49	Main st.	Carpenter.
	c 6	166	Eli W. Reed,	4.6	48	Tarkiln Hill road.	Teamster.
	**	158	Lemuel A. Wash-	66	48	Acushnet ave.	66
Dec.	4, 1882.	164	Geo. W. Hawes,	66	32	**	44
Jan.	5, 1882.	145	Isaac Reed,	66	21	"	Carpenter.
Oct.	8, 1885.	155	Jas. L. Haskins,	66	21	**	Teamster.
Apr.	7, 1886.	156	John Daly,	66	27	66	Box maker.
Nov.	3, 1886.	163	Henry E. Reed,	66	20	Tarkiln Hill road.	Teamster.
Nov.	3, 1886.	150	Job T. Haskins,	44	40	Mill st.	Laborer.
Nov.	3, 1886.	162	Geo. W. Chudleigh,	66	21	Main st.	Hostler.
Dec.	1886.		John F. Parker,	Torch.	18	Acushnet ave.	Carriage
	1886.		Geo. H. Gifford,	. 46	17		Painter. Clerk.

NEW BEDFORD PROTECTING SOCIETY.

President, Charles S. Kelley; First Director, Jonathan Handy; Second Director, William A. Robinson; Third Director, Charles H. Lawton; Fourth Director, Edward T. Pierce; Fifth Director, Charles M. Haskell; Sixth Director, Edmund F. Maxfield; Seventh Director, Edmund Wood; Eighth Director, John H. Lowe; Secretary and Treasurer, Edward H. Allen.

Francis T. Akin. Gilbert Allen. Gideon Allen, Jr., George H. H. Allen, O. Frank Blv. Standish Bourne, George E. Briggs, Thomas Boardman, Charles A. Case, R. C. P. Coggeshall. Edwin Dews, Henry C. Denison, John H. Denison. Ernest A. Dunham, Joseph Dawson, Heman Ellis, Joseph Dias, Edward R. Gardner, Edmund Grinnell, Frank H. Gifford, A. W. Hadley, Charles B. Hillman, John I. Howland, Charles M. Hussey, Henry F. Hammond, Thomas H. Knowles, G. D. Kingman, Edgar R. Lewis, Philander F. Manchester, Willard Nye, Jr., Charles W. Plummer, George F. Parlow,

William F. Potter. Arthur E. Perry. James N. Parker. William H. Pitman. Charles L. Paine. William F. Reed, Morgan Rotch, William A. Russell, Arthur E. Robbins, Lewis H. Richardson, Gardner T. Sanford, R. W. Swift, Frederick Swift, William T. Smith, Leander H. Swift, Edward S. Shaw, Robert Snow. Charles M. Taber, Henry J. Taylor, Joseph Tillinghast, William T. Taylor, Henry W. Taylor, Francis C. Terry, Alfred G. Wilbor, William H. Willis, Horace Wood, William O. Woodman, Frederick A. Washburn, Edward L. Wilde. Thomas F. Wood, William R. West, Frederick D. Wade.

Mark T. Vincent.

Fire Alarms, Losses and Insurance for 1886.

The loss by fire for the year 1886 was, in the aggregate, \$26,786.03. Amount of insurance, \$1,108,800.00. Number of bell alarms, 27. Still and telephone alarms, 45.

January 2d. (Telephone.) Fire in the Swain Free School, on County street. Cause, burning soot falling down chimney. Extinguished by men from C. Howland engine house. No loss.

January 11. 8 A. M., box 24. Fire in building No. 57 North Ash street, owned by Henry Miles and occupied by himself, Lincoln Douglass and Miriam Brown. Cause, defective chimney. Companies responding: Engines 2 and 5, Hooks and Ladder No. 1 and Franklin Hose. Alarm given by John Taber. Loss on building \$282; Insurance \$900. Loss on furniture \$53; Insurance \$600.

January 14. (Telephone.) 10.30 A. M. Fire in house No. 214 Union street, owned and occupied by Thos. B. Wilcox. Cause, overheated water pipes. Extinguished by men from Central engine house.

January 17. (Still.) Fire in chimney of house No. 67 Middle street. Extinguished by men from Central engine house.

January 18. (Still.) 8.45 A. M. Fire in store No. 583 Purchase street, owned by Jacob Howard and occupied by Anna C. Gindohos. Cause, gas light coming in contact with goods in window. Loss on building \$1 50; Insurance \$2,000. Loss on stock \$35.50; Insurance \$1,000.

January 22. 3.45 A. M. (Still.) Fire in house corner of Purchase and High streets, owned by Dr. F. B. Nesbitt, and occupied by himself, L. T. Parlow and Seth Hatch. Cause, defective chimney. Extinguished by Engineer Parlow and men from the Central engine house. Loss on building \$50; Insurance \$4,000.

January 22, 1.15 P. M. (Telephone.) Fire in house northeast corner of Union and Bethel streets, owned by estate of S. A. Howland and occupied by John O'Donough. Cause unknown. No loss.

February 2, 8.25 A. M. Box 7. Fire in photograph saloon No. 669 Purchase street, owned and occupied by Ademore Benoit. Cause, overheated stove pipe. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by Fred. H. Wood. Loss on building \$90; insurance \$600. Loss on stock \$416; insurance \$600.

February 5. (Telephone.) Fire in chimney of house on Morgan street, owned and occupied by Dr. John H. Mackie. Extinguished by men from Central engine house. No loss.

February 6, IP. M. Box 34. Fire in building No. II First street, owned by heirs of Dr. Ezra Johnson and occupied by Sarah Howard and others. Cause, woman smoking pipe in bed. Companies responding: Engines 2 and 4, Hook and Ladder No. I and Franklin Hose. Alarm given by Chas. S. Kelley. At this fire Mrs. Sarah Howard was so severely burned that she died in a few hours. Loss on building \$1000; no insurance.

February 8. (Still.) 12 M. Fire in drug store of F. M. Douglass, corner of Union and Fifth street. Cause, explosion of chemicals. Loss \$40; insurance \$3000.

February 12. (Still.) Fire in store of Sanders & Barrows on William street, owned by B. H. Waite. Extinguished by men from Central engine house. No loss.

February 17. (Still.) Fire in house No. 9 Rivet street, owned by Potomska mills and occupied by Sullivan. Cause, oil in kerosene lamp running over. No loss.

February 26, 6.40 P. M. (Telephone.) Fire in building on Eighth street, occupied by Mrs. Sarah Swain. Extinguished by men from Central engine house. No loss.

March 1, 4.05 P. M. Box 24. Fire in building corner of Park and Kempton streets, owned by estate of Barney Corey and occupied by John Burke. Cause, defective chimney. Companies responding: Engines 2 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by John C. Taber. Loss on building \$250; no insurance. Loss on furniture \$50; no insurance.

March 3, 9.45 P. M. (Telephone.) Fire in Friends' Meeting House on Spring street. Cause, defective chimney. Responded to by men from Central and No. 4 engine houses. Loss \$50; insurance \$5000.

March 4, 3.45 A. M. Box 4. Fire in greenhouse owned by Deborah J. C. Hathaway and occupied by Wm. A. Hathaway, situated near the railroad station at Mt. Pleasant. Cause, overheated pipe. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by Chief Macy. Loss on building \$635; insurance \$600. Loss on contents \$600; no insurance.

March 4, 10.30 A. M. (Still.) Fire in house occupied by Herbert Demoranville. Cause, meat in oven burning. Responded to by men from No. 5 engine house. No loss.

March 5, 6.12 P. M. Box 35. Fire in house on Acushnet avenue, owned and occupied by D. P. Gardner. Cause, paper in register taking fire. Companies responding: Engines 2 and 4, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. No loss.

March 5. (Still.) Fire in building on Purchase street, owned by Edward Milliken and occupied by Edward Cowen and others. Caused by boy throwing lighted match on floor. No loss.

March 14, 8.30 P. M. (Telephone.) Fire in house No. 23 Hawthorn street, owned and occupied by Mrs. George B. Hussey. Cause, defective chimney. Responded to by men from No. 4 engine house. No loss.

March 21, 3.45 P. M. (Still.) Fire in E. B. Sherman's restaurant in Liberty Hall building. Cause, petroleum lamp running over. Responded to by men from Central engine house. Loss on building \$6.81; insurance \$19,000.

March 22, IP. M. Box 58. Fire in house on South Water street, owned and occupied by Benjamin C. Warren. Cause, overheated stove pipe. Companies responding: Engines 4 and 6, Hook and Ladder No. I and Franklin Hose. Alarm given by citizen. Loss \$25; no insurance.

March 23, 8 a. m. (Still.) Fire in house on Hall street, owned by Dennis Sullivan and occupied by Cassidy. Cause, burning soot in chimney. Responded to by men from No. 6 engine house. No loss.

March 23, 6 P. M. (Telephone.) Standard building. Cause, smoke filling building from flue to second story. Responded to by men from Central engine house. No loss.

March 25, 5.11 P. M. Box 73. Fire in picker house of Potomska mill. Cause, overheated bearing. Companies responding: Engines 2, 4, 5, 6, Hook and Ladder No. 1 and Franklin Hose. Alarm given by employes. Loss \$6,447.01; insurance \$500,000.

April 29. (Still.) Fire on roof of Gosnold Mills. Cause, sparks from chimney. No loss.

April 30, 4.42 P. M. Box 7. Fire in building No. 3 Turners Court, owned by James Wilber of North Dartmouth, and occupied by four families. Cause, children playing with matches. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. Loss on building \$72; insurance \$1000.

May 1, 7.45 A. M. (Telephone.) Smoke from chimney in Grace church. Responded to by men from Central and No. 4 engine houses. No loss.

May 3, 5.28 P. M. Box 23. Fire in woods on West Maxfield street. Companies responding: Engine No 5 and Franklin Hose. Alarm given by Chief Macy.

June 19, 2.15 P. M. Box 12. Fire in house on Cedar street, owned and occupied by Lewis Gifford. Cause, hot ashes. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. Loss on building \$20; insurance \$1000.

June 20, 10.30 A. M. (Still.) Fire in building No. 279 South Water street, owned by Mrs. Enos and occupied by a family named Connors. Cause, wood placed in oven heating. Responded to by men from No. 6 engine house. No loss.

June 23, 12.20 A. M. Box 15. Fire in house No. 127 Smith street, owned and occupied by Tillinghast Kirby. Cause, defective flue. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by Officer Lee. Loss on building \$500; insurance \$500.

July 3, 10 A. M. (Telephone.) Fire in building northwest corner of Union and Pleasant streets. Cause, smoke from chimney. Responded to by men from Central engine house. No loss.

July 5, 12.45 P. M. Box 51. Fire in house on Fair street. Cause, fireworks. Companies responding: Engines 4 and 6, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. No loss.

July 6, 1.05 P. M. Box 24. Fire on roof of house No. 220 Kempton street, owned and occupied by Patrick H. Norton. Cause, fire crackers. Companies responding: Engines 2 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. No loss.

July 9, 12.30 P. M. Fire in house of H. M. Dinwoodie, Acushnet. Responded to by men from Hancock, No. 9.

July 19, 10 A. M. (Telephone.) Small fire in chimney rear of Marshall P. Banks' barber shop, No. 97 North Water street. Responded to by men from Central engine house. No loss.

July 22, 7 A. M. (Still.) Fire on roof of bake house on Centre street, belonging to estate of Samuel Watson. No loss.

July 23, 2.30 P. M. (Still.) Fire in woods on Rivet street. Responded to by men from No. 6 engine house.

July 29, 3.29 P. M. Box 125. Fire in building No. 938 Acushnet avenue, owned by Dennis O'Neil and occupied by Patrick Mullens. Cause, fire in wood box. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by John H. Lowe. No loss.

August 2, 3.10 A. M. (Telephone.) Fire in Mt. Washington Glass Works. Cause, heat from furnace. Responded to by men from Nos. 4 and 6 engine houses. No loss.

August 9, 3 P. M. Box 9. Fire in blacksmith shop on Acushnet avenue, owned and occupied by the Old Colony Railroad Co. Cause, sparks from chimney. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. No loss.

August 15, 8.55 P. M. Box 46. Fire in house No. 9 Griffin street, owned and occupied by a Portuguese family. Cause, explosion of lamp. Companies responding: Engines 4 and 6, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. No loss.

September 10. (Still.) Fire in house on Hillman street owned and occupied by Henry Taber. Cause, explosion of gasoline stove. Extinguished by men from No. 5 engine house. Loss \$20; insurance \$2000.

September 11, 1.10 P. M. (Still.) Fire in house corner of Rivet and Water streets, owned by James Rock. Cause, defective chimney. No loss.

Sept. 23, 6.15 P. M. Box 58. Fire in building rear of No. 41 Cove street, owned by S. T. Viall and occupied by Mrs. Margaret A. Dyer. This fire also communicated to another building owned and occupied by S. T. Viall. Cause, children playing with matches. Companies responding: Engines 4 and 6, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. Loss on building \$281; insurance \$2500. Loss on furniture, etc., \$380.25; insurance \$600.

Sept. 23. (Still.) Fire in barber shop of Marshall P. Banks, No. 97 North Water street. Cause, curtain coming in contact with stove. No loss.

Sept. 23, 10 A. M. (Still.) False alarm caused by smoke in drug store of H. E. Hicks, corner of Purchase and North streets.

Sept. 25. (Still.) Fire in picker room of Wamsutta Mills. Cause, foreign matter in cotton. Extinguished by automatic sprinkler. Loss \$167.35; insurance \$500,000.

Oct. 4. (Telephone.) Fire in building on Union street, occupied by F. B. Aulich as a decorating shop. Cause, overheated chimney. Extinguished by men from central engine house.

Oct. 20, 4.40 P. M. Boxes 32 and 37. Fire in building on Arnold street, owned by Hon. Wm. J. Rotch and occupied by gardener. Cause, rats and matches. Companies responding: Engines 2, 4 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. Loss on building \$208; insurance \$1000. Loss on furniture \$100; no insurance.

Oct. 22, 5.30 P. M. Box 39. Fire in house No. 21 Howland street, owned by Domingo Cardoza and occupied by Amelia Augusta. Cause, explosion of petroleum lamp. Companies responding: Engines 3 and 6, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. No loss.

Oct. 22. (Still.) Fire in chimney of shop foot of Union street, occupied by F. B. Aulich. Responded to by men from Central engine house with Franklin Reel. No loss.

Oct. 23, 8.19 P. M. Box 34. Fire in building on William street, owned by Pardon Cornell, and occupied by Smith Bros., glass decorators. Cause, defective chimney. Companies responding: Engines 2 and 4, Hook and Ladder No. 1 and Franklin Hose. Alarm given by Officer Sisson. Loss on building \$946; insurance \$1500. Loss on stock \$5109.08; insurance \$8000.

Oct. 24, 8 P. M. (Telephone.) Fire in woods on West Maxfield street. Responded to by men from No. 4 engine house.

Oct. 25th, 1.14 A. M. Box 123. Fire in dwelling house on Acushnet avenue, occupied by Capt. L. B. Bronson. Cause, defective chimney. Companies responding: Engines 1 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by citizen. Loss on building \$60; insurance \$1400. Loss on furniture \$20; insurance \$600.

Oct. 29, 10 A. M. (Telephone.) Fire in chimney of house on Hawthorn street, occupied by Arthur Grinnell. Responded to by men from No. 4 engine house. No loss.

Nov. 5, 6 P. M. (Telephone.) Fire in house southwest corner of Middle street and Acushnet avenue. Cause, defective chimney. Responded to by men from Central engine house. No loss.

Nov. 17, 8.50 A. M. (Telephone.) Fire in house on Acushnet avenue, owned and occupied by James B. Hamlin. Cause, defective chimney. Responded to by men from Central engine house. No loss.

Nov. 19. (Telephone.) Fire in tenement house on North Front street, owned by Wamsutta Mills Co. Cause, boiling over of fat. No loss.

Nov. 24. (Telephone.) Fire in house corner of Arnold and Orchard streets, belonging to estate of Capt. William Hathaway. Cause, spontaneous combustion. No loss.

Nov. 24. (Still.) Fire in shop of Joseph Cunha, on Union street. Cause, sparks from electric light carbon. No loss.

Dec. 2, 10 P. M. (Telephone.) Fire in house corner of Acushnet avenue and Elm street. Fire in closet of clothes. Responded to by men from Central engine house. No loss.

Dec. 4, 12 M. (Telephone.) Fire in house rear of S. M. Hall's laundry on Acushnet Avenue. Cause, children playing with matches. Responded to by men from No. 1 engine house.

Dec. 6, 9.05 P. M. Box 27. Fire in E. B. Sherman's restaurant, in Liberty hall building. Cause, defective furnace. Companies responding: Engines 2 and 4, Hook and ladder No. 1 and Franklin Hose. Alarm given by citizen. Loss on building \$393.60; insurance \$19,000. Loss on stock \$850; insurance \$1800.

Dec. 10, 4.42 P. M. Box 3. Fire in store on Acushnet avenue, owned and occupied by Edward C. Taber. Cause, sparks from stove. Companies responding: Engines 1 and 9, Hook and Ladder No. 1 and Franklin Hose. Alarm given by George A. Cobb. Loss on building \$1552; insurance \$1600. Loss on stock \$2950; insurance \$3000.

Dec. 16, 9.18 P. M. Box 27. Fire in store corner of William street and Acushnet avenue, owned by George A. Bourne and others, and occupied by F. W. Oesting. Cause, defective furnace. Companies responding: Engines 2 and 4, Hook and Ladder No. 1 and Franklin Hose. Alarm given by George B. Russell. Loss on building \$75; insurance \$9000. Loss on stock \$2996.21; insurance \$6000. Loss on fixtures \$140; insurance \$500.

. Dec. 20, 7.03 P. M. Box 25. Fire in house on County street owned and occupied by Capt. Edward Coggeshall. Cause, petroleum lamp getting fire. Companies responding: Engines 2 and 5, Hook and Ladder No. 1 and Franklin Hose. Alarm given by Charles S. Paisler. No loss.

Dec. 30, 7.45 A. M. Still. Fire in building corner of Acushnet avenue and Spring street, owned by heirs of Joseph Brownell, and occupied as a store by George W. Macomber and tenement by Charles M. Jay. Responded to by men from Central engine house. Cause, falling of petroleum lamp. Loss on building \$6; insurance \$1000. Loss on stock \$15; no insurance.

Dec. 31, 4.25 A. M. Box 45. Fire in house on Allen street, owned and occupied by Robert Scales. Cause, defective stove pipe. Companies responding: Engines 4 and 6, Hook and Ladder No. 1 and Franklin Hose. Alarm given by Officer Savage. Loss on building \$569; insurance \$1000. Loss on furniture \$300; insurance \$500.

The following is the amount of losses by fire in this city for the past ten years, together with the amount of insurance on same:

Years.	Loss.	Insurance.
1877,	\$26,063.66	\$21,528.36
1878,	28,154.46	66,025.00
1879,	9,163.16	54,950.00
1880,	7,609.13	49,450.00
1881,	26,624.96	86,979.00
1882,	23,169.64	692,950.00
1883,	17,398.14	77,450.00
1884,	134,729.82	310,950.00
1885,	6,982.41	148,025.00
1886,	26,786.03	1,108,800.00

FIRE ALARM TELEGRAPH, 1886.

SUPERINTENDENT.

FREDERICK MACY, Chief Engineer.

ASSISTANT SUPERINTENDENT.

DANIEL D. BRIGGS.

Residence, Engine house, N. W. cor. Bedford and South Sixth streets.
Office, City Hall.

LOCATION OF SIGNAL BOXES.

- No. 3. Lund's Corner.
 - 4. Acushnet Heights, near reservoir.
 - 123. Acushnet avenue, near Coffin avenue.
 - 125. Near gate house, railroad crossing.
 - 126. Cedar Grove and North Front streets.
 - 5. Linden and Ashland streets.
 - 6. Hazard and State streets.
 - 7. Purchase and Franklin streets.
 - 8. County and Pearl streets.
 - 9. Wamsutta street and Acushnet avenue.
 - 12. Shawmut avenue and Durfee street.
 - 13. Cedar and Locust streets.
 - 14. Purchase and Willis streets.
 - 15. Smith and Cedar streets.
 - 16. County and Hillman streets.
 - 17. Maxfield street and Acushnet avenue.
 - 18. Purchase and North streets.
 - 21. North and Water streets.
 - 23. Kempton, west of Florence street.
 - 24. Kempton and Cedar streets.
 - 25. County and Kempton streets.
 - 26. Water and Middle streets.
 - 27. Purchase street and Mechanics lane.

- 98. Court and Cedar streets.
- 29. Arnold and Ash streets.
- 32. Union and Eighth streets.
- 34. Union and Water streets.
- 35. Fourth and School streets.
- 36 Walnut and Water streets.
- 37. Madison and Orchard streets.
- 38. Bedford and Sixth streets.
- 39 Acushnet avenue and Cannon street.
- 41. Hawthorn and Page streets.
- 45. Allen and Bonney streets.
- 46. South Water and Leonard streets.
- 47. Junction Sixth and County streets.
- 48. Water and South streets.
- 51. Dartmouth and Rockland streets.
- 52. Fourth street, head of Potomska.
- 56. South Water and Rivet streets.
- 57. Mosher and County streets.
- 58. South Water and Cove streets.
- *61. N. B. & Fairhaven Horse Car Stables.
- *(:) Grinnell Mill.
- *63. Wamsutta Mills.
- *64. New Bedford Manufacturing Company.
- *65. Hathaway, Soule & Harrington.
- *67. New Bedford Cordage Factory.
- *68. New Bedford Copper Works.
- *71. Pairpoint Manufacturing Company.
- *79 George Delano's Sons & Co's Works.
- *73. Potomska Mills.
- *74. Acushnet Mills.
- *75. Morse Twist Drill Company.

LIST OF FIRE ALARM KEYS FOR 1886.

- 1 Samuel C. Hart.
- 2 A. C. Tripp.
- 3 David Moncrief.
- 4 Engine house No. 1.
- 5 George A. Bourne.
- 6 Andrew M. Swift.
- 7 Silas D. Dammon. 8 Engine house No. 5.
- 9 Gosnold Mills Corporation.
- 10 Henry H. Fisher's bakery. 11 Lloyd B. Brown.
- 12 Seth Codding.
- 13 Philip Tripp.
- 14 Engine house No. 2.

- 15 County jail office.
- 16 James D. Thompson.
- 17
- 18 Wm. H. Sherman's stable.
- 19 Hart & Akin.
- 20 Henry Taber.
- 21 Engine house No. 4.
- 22 Thomas B. Tripp.
- 23 City Planing Mill.
- 24 R. S. Cornell's stable.
- 25 Geo. Delano's Sons & Co.
- 26 Seth C. Caldwell.
- William Hindle. 27
- 28 Frederick F. Moulton.

^{*}Private boxes, only to be rung for fire on the premises.

29 Samuel C. Moore.

30 E. Dews.

31 Joshua B. Ashley.32 James E. Blake.33 William A. Pease.

34 Josiah Richmond.

35 Lowe's store, corner Ash and Arnold streets.

36 Jirch Swift.

37 J. L. Paddock.

38 Mrs. Joseph R. Reed.

39 E. Anthony & Sons' office. 40 Mrs. C. M. Peirce, Jr.

41 John S. Cook's stable.

42 Mercury Publishing Co's office.

43 Frank C. Bliss.

44 John Clare.

45 Lost, May, 1885.

46 W. A. Robinson & Co's factory.

47 — Jenney. 48 Denison Bros.

49 Thomas J. Taft. 50 Arthur H. Jones.

51 Motin Yancey. 52 J. L. Wilber.

53 Lost, Dec., 1872. 54 James A. Wixon. 55 Seth E. Bryant.

56 Chief engineer's office.

58 Henry H. Fisher.

59 Michael F. Kennedy. 60 Lost, 1876.

61 Benjamin F. H. Reed.

62 Lost, Jan., 1874. 63 Horace G. Howland. 64 George H. Clark.

65 N. B. Gas Light Co.

66 Hastings & Co's factory. 67 Edward Kilburn. 68 L. T. Parlow.

69 P. B. Sherman. 70 A. A. Wood.

71 William E. Macomber.

72 Frederick Macy. 73 Moses H. Bliss.

74 Abram H. Howland, Jr.

75 George L. Brownell. 76 James M. Tripp.

77 Potomska Mills Corporation.

78 John Corey.

79 Chief of Police office,

80 Isaac B. Tompkins, Chief of Police.

81 Henry W. Bumpus. 82 Rufus A. Soule.

83 William H. Sherman.

84 L. D. Adams.

85 Luther M. Dayton.

86 Wamsutta Mills, gate keeper's lodge.

87 A. Negus. 88 Chief Engineer's office.

89 Destroyed.

90 John W. Brady. 91 Henry Stevens. 92 James G. Sinclair.

93 West Police Station.

94 E. T. Case.95 R. Moynan.

96 Police. 97 Joseph B. Wing. 98 Joseph D. L. Sisson.

99 Isaac M. Jones. 100 Lost, May, 1874.

101 Patrick Cannavan.

102 Allen L. Lee.

103 Frederick P. Bliss. 104 Thomas W. Comstock.

105 D. A. Butler.

106 Ellery T. Pierce.

107 F. Hussey. 108 W. G. Howland.

109 James Dowden.

110 James A. Mitchell. 111 John H. Gifford.

112 F. L. Hathaway. 113 David G. Kirby.

114 Lost, Nov., 1875. 115 J. W. Arnett.

116

117 William C. Gifford. 118 George W. Page.

119 Timothy Sullivan. 120 Daniel D. Briggs.

121 John Savage.

122 Eben C. Milliken's bakery. 123 Marcus W. Taber.

124 Rodolphus Beetle.

125 Bryant Bros.' factory.

126 Mrs. Henry T. Wood. 127 Lemuel M. Kollock.

128 D. A. Snell.

129 Thomas Boardman. 130 Robert S. Lawton.

131 G. A. Taylor.

132 L. G. Hewins, Jr.

133 Charles S. Paisler.

134 Lost.

135 Hathaway, Soule & Harring-

136 Henry Howard.

137 Mt. Washington Glass Co.

138 Amanda M. Peirce.

139 Fred A. Sowle.	195 Acushnet Mill.	
140 S. P. Richmond.	196)	
141 E. H. Martin.	196 Grinnell Mill. 197 Pairpoint Mfg. Co.	
142 Cornelius J. Murphy.	108 Pairmoint Mfc Co	
143 George A. Cobb.	100 Crinnell Mill	
141 Augustus Hominaton	199 Grinnell Mill.	
144 Augustus Harrington.	200 N. B. Cordage Co.	
145 E. C. Taber.	201 Wamsutta Mills.	
146 Acushnet Paper Mill.	202	
147 Engineer's office.	203 N. B. Cordage Co.	
148 George S. Anthony.	204	
149 Daniel J. Humphrey.	205	
150 Charles H. Robbins.	${206 \atop 207}$ Acushnet Mill.	
151 Alexander O. Peirce.	. 201)	
152 Elisha E. Russell.	208]	
153 Chief of Police office.	209 Wangutta Milla	
154 Police.	210 Wamsutta Mills.	
155 Michael Stevens	211	
156 George S. Handy.	212 Grinnell Mill.	
157 James Wilson.	213 N. B. Manufacturing Co.	
158 No. 6 engine house.	214 Hathaway, Soule & Harrington.	
159 Mrs. B. R. Paine.	215 Potomska Mills.	
160 Thomas Donaghy.	216 Hathaway, Soule & Harring-	
161 John Sylvia.	ton.	
162 Thomas Donaghy's store.	917)	
162 William A Posso	210 Dotomaka Wills	
163 William A. Pease. 164 Frederick Cushman.	$\left. \begin{array}{c} 217\\ 218\\ 219 \end{array} \right\}$ Potomska Mills.	
	2107	
165	220	
166 Washington A. Eldridge.	221 New Bedford Mfg. Co.	
167	222	
168 W. F. Wheaton.	223 J	
169 T. B. Rowe.	224) Hathaway, Soule & Harring-	
170 Henry Parsons.	$225 \int$ ton.	
171 Tillinghast & Terry's watch-	226]	
man.	227 M. T. D. & Machine Co.	
172 Thomas Pelan.	228	
173 William Osgood.	229]	
174 Roland R. Ashley.	230)	
175 John H. Lowe.	231 \ N. B. Copper Co.	
176 William J. Marr.	232)	
177 John H. Thomson.	233 S. Eggers.	
178 John Lincoln.	234 N. B. Copper Co.	
179 Lemuel T. Terry.	235 George Delano.	
180 J. C. Omey.	236 Wamsutta Mills.	
181 Chief Engineer's house.	237 Pierce & Bushnell.	
182 Horse car stable.	238 D. D. Briggs.	
183 Old Colony R. R. gate house.	239 George W. Hillman.	
184 James Davis.	240 James H. Sherman.	
185 D. A. Snell's house.	241)	
186 Abram Francis.	242 George Delano.	
187 O. G. Brownell.	243) George Denamo.	
188 John Wing.	244 William J. Clark.	
	245 Patrick Kennedy.	
189 Charles C. Taber.	246 Chief of Police office.	
190 Chief Engineer's office.		
191 Thomas M. Hart.	247 Joseph H. Day. 248)	
192 Jonathan Bourne.		
193 J. G. Ellis.	249 Chief of Police office.	
194 Mt. Washington Glass Works. 250)		

251 John Ward.	289 John P. Taylor.
252 Louis H. Richardson.	290 Rural Cemetery gate.
253)	291 G. L. Brownell.
254	292 A. H. Covell.
$\begin{bmatrix} 252 \\ 255 \end{bmatrix}$	293 E. J. Collamore.
	294 George B. Russell. 295 O. F. Bly.
257	296 L. A. Plummer.
258	297 C. E. Lee.
259 J	
260 W. K. Wagner.	298 Edward D. Mandell.
261 Richard S. Taber.	299 Fred S. Potter.
262 Pairpoint Manufacturing Co.	300 Loum Snow.
263 George B. Wheeler.	301 George Howland.
264 Mrs. Leonard.	302 No. 83 Dartmouth street.
265 F. A. Sowle & Son.	303 A. Hurd.
266 Charles S. Kelley.	304 Greene & Wood.
267 Horse car stables.	305 John Smith.
268 John C. Parker.	306 William H. Smith.
269 Thomas D. Howland.	307 Acushnet Horse Car Co.
270 William H. Mitchell.	308 Bowker & Tripp.
271 — Farrar.	309 Walter Clifford.
272 James M. Lyons.	310 King Manufacturing Co.
273 John Lowe.	311)
274 Henry L. Dunham.	312
275 William F. West.	313 Chief of Police.
276 Benjamin H. Reed.	314 Ciner of Tonce.
277 Calvin K. Turner.	315
278 Horse car stable.	316
279 N. B. & N. Y. Steamship Co.	317 Greenwood House.
280 Charles Randall.	318 E. Grinnell Iron Foundry.
281 George Vogel.	319 Opera House office.
282 John H. Williams.	320 Brayton's wood yard.
283 Chief of Police office.	321
284 Smith Brothers.	322 Chief of Police.
285 I. H. Shurtleff.	323 F. O. Covil.
286 Switch tender's lodge.	324
287 C. O. Andrews.	325
288 Orphans' Home.	
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LOCATION OF HYDRANTS.

ACUSHNET AVENUE.

Southwest corner of Coggeshall street. Post. Southwest corner of Cedar Grove street. Post. West side, south of Logan street. Post. West side, north of Wamsutta street 514 feet. Double. West side, north of Wamsutta street. Post. West side, south of Wamsutta street 255 feet. West side, at end of Wall street. Post. Southeast corner of Pope street. Northwest corner of Willis street. West side, south of Campbell street 179 feet. Northwest corner of Maxfield street. Northwest corner of Kempton street. Northeast corner of Elm street. Northwest corner of School street. Post. Northwest corner of Madison street. Northwest corner of Russell street. Northwest corner of Bedford street. West side, head of Howland street. Northeast corner of Potomska street. Post. West side, south of Potomska street. Post. Southwest corner of Blackmer street.

ALLEN STREET.

Southeast corner of Bonney street. Northwest corner of Ward street. North side, east of Page street 159 feet.

ARCH STREET.

Southwest corner of Union street.

ARNOLD STREET.

South side, west of Orchard street 96 feet. Post. Southwest corner of Emerson street. Southeast corner of Atlantic street.

ASH STREET.

Northwest corner of Middle street.
Southwest corner of Morgan street.
Northwest corner of Arnold street.
Northwest corner of Maple street.
Northwest corner of Bedford street.
Post.

ASHLAND STREET.

West side, head of Linden street.

ATLANTIC STREET.

West side, north of Arnold street 390 feet. Post. West side, south of Arnold street 186 feet. Post.

AUSTIN STREET.

Southeast corner of State street. Post. South side, east of Cedar street 423 feet. Post. South side, west of Cedar street. Post.

BAY STREET.

Southeast corner of Ward street. Post.

BEDFORD STREET.

Southwest corner of Fifth street. Southeast corner of County street. Southeast corner of Orchard street.

BEACH STREET.

Northwest corner of Kempton street. Post.

BLACKMER STREET.

South side, east of Front street 575 feet. Post.

BONNEY STREET.

Northwest corner of Grinnell street. Northwest corner of Rockland street. Post.

BORDEN STREET.

Southwest corner of Bay street. Post.

BOWDITCH STREET.

West side, north of Cedar Grove street 73 feet. Post. West side, south of Cedar Grove street 313 feet. Post. Southwest corner of Weld street. Post.

CAMPBELL STREET.

South side, west of Chestnut street. Post. South side, east of Emerson street 205 feet. Southwest corner of Cypress street. Post.

CANNON STREET.

South side, east of Second street 164 feet.

CEDAR STREET.

Northwest corner of Elm street. Double. Southwest corner of Kempton street. West side, north of Mill street 75 feet. Southwest corner of Hillman street. Northwest corner of Sycamore street. Southwest corner of Campbell street. Southwest corner of Parker street.

CEDAR GROVE STREET.

Southeast corner of Howard street. Post. Northwest corner of Purchase street. Post. North side, east of State street 13 feet. Post. Southeast corner of Front street. Post.

CENTRE STREET.

South side, east of Water street 85 feet.

CHANCERY STREET.

West side, south of Parker street 176 feet. Post. Southwest corner of Hillman street. Southwest corner of Elm street. Post. West side, north of Arnold street 405 feet. Post. West side, north of Parker street 263 feet. Post.

CHERRY STREET.

Southeast corner of Seventh street.

CHESTNUT STREET.

Southwest corner of North street. West side, north of Campbell street 96 feet.

CLARK STREET.

Southwest corner State street.

CLARK'S POINT ROAD.

West side, east of French avenue 650 feet.

CLINTON STREET.

South side east of Orchard street 125 feet. South side, west of Ash street 242½ feet. Post.

COFFIN AVENUE,

Southwest corner of North Purchase street. Post. South side, opposite Oneko lane. Post. Southeast corner of Bowditch street. Post.

COFFIN STREET.

North side, east of Water street 262 feet.

COGGESHALL STREET.

Northwest corner of Purchase street. Post, Southeast corner of County street. Post.

COMMERCIAL STREET.

North side, east of Front street 82 feet. Post.

COTTAGE STREET.

Southwest corner of Bay street. Post.

Northwest corner of Allen street.

Northwest corner of Bedford street.

Northwest corner of Hawthorn street.

Southwest corner of Arnold street.

Southwest corner of Union street.

COUNTY STREET.

Southwest corner of Austin street. Post.

Northwest corner of Locust street.

Northwest corner of Parker street.

Southwest corner of Smith street.

Southwest corner of Maxfield street.

Southwest corner of North street.

Southwest corner of Middle street. Double.

Southwest corner of Morgan street.

Northwest corner of Union street.

West side, head of School street.

Northwest corner of Madison street.

Southwest corner of Hawthorn street.

Northwest corner of Allen street.

Southwest corner of Grinnell street.

West side, head of South street.

COUNTY STREET.

Northwest corner of Rockland street.
West side, north of Division street 71 feet. Post.
Northwest corner of Cove road.
Northwest corner of Winsor street. Post.
Northwest corner of Rivet street. Post.
Southwest corner of Thompson street. Post.
West side, south of Clark street 184 feet.
West side, north of Coggeshall street 200 feet. Post.

COURT STREET.

Southwest corner of Orchard street.
South side, head of Cedar street.
South side, head of Emerson street.
South side, front of the Tannery.
South side, head of Jenney street. Post.
South side, east of Reed street 300 feet. Post.
Northeast corner of Ash street. Post.

COVE STREET.

South side, east of Water street 487 feet. South side, west of Water street 334½ feet. Post. Southeast corner of County street. Post.

CRAPO STREET.

West side, south of Washington street 343 feet. West side, south of Rockland street 225 feet. West side, south of Thompson street. Post.

CYPRESS STREET.

Northwest corner of Hillman street. Northwest corner of Sycamore street. Southwest corner of Kempton street. Post. West side, north of Locust 263 feet. Post.

DARTMOUTH STREET.

Southeast side, southwest of Orchard street 110 feet. Southeast side, southwest of Hickory street 125 feet. Post.

DELANO STREET.

Southwest corner of Water street. Post. Southwest corner of Acushnet avenue. Post.

DURFEE STREET.

Southwest corner of Cedar street. Double.

ELM STREET.

Southwest corner of Pleasant street. Southwest corner of Summer street.

EMERSON STREET.

Southwest corner of Willis street. Southwest corner of Parker street.

FIFTH STREET.

Southwest corner of School street. Post. West side, south of Madison street 245 feet. Northwest corner of Grinnell street.

FIRST STREET.

Southwest corner of Spring street. West side, south of School street 109 feet. West side, south of Howland street 185 feet. West side, south of South street 255 feet.

FLORENCE STREET.

West side, north of North street 180 feet. Post. Northwest corner of Mill street. Post. West side, north of Kempton street 126 feet. Post. Southwest corner of Morgan street. Post.

FOREST STREET.

South side, west of County street 90 feet.

FOSTER STREET.

Southwest corner of Maxfield street. Northwest corner of High street.

FOURTH STREET.

West side, north of School street 106 feet.
West side, south of Madison street 210 feet.
East side, foot of Washington street. Post.
Northwest corner of Rockland street.
West side, south of Potomska street 61 feet. Post.

FRANKLIN STREET.

Southwest corner of Pleasant street.

FRENCH AVENUE.

West side, south of Clark's Point road 14 feet.

FRONT STREET.

West side, north of Delano street 191 feet. Post. West side, south of South street 330 feet. Post. West side, south of Howland street 268 feet. Post. Northwest corner of lane head of Merrill's wharf. West side, south of Commercial street 86 feet. Southwest corner of Centre street. Southwest corner of Hazard's wharf. Southeast corner of Wamsutta street. Post. West side, south of Logan street 383 feet. Post. West side, south of Washburn street 319 feet.

GRAPE STREET.

South side, west of Lewis street 131 feet. Post. South side, west of Lewis $517\frac{1}{2}$ feet. Post.

GRIFFIN STREET.

Southwest corner of Second street.

GRINNELL STREET.

Southwest corner of Orchard street. Post. South side, east of Crapo street 103 feet. South side, west of Acushnet avenue 76 feet.

GROVE STREET.

Southwest corner of Anthony street.

HAWTHORN STREET.

Southeast corner of Page street. South side, east of Tremont street 147 feet. Post. Southwest corner of Brigham street. Post. South side, west of Brigham street 301 feet. Post.

HAZARD STREET.

South side, west of State street 140 feet. Southwest corner of Pleasant street.

HICKS STREET.

South side, east of Acushnet avenue 276 feet. Post.

HIGH STREET.

South side, east of Acushnet avenue 43 feet. South side, east of County street 177 feet.

HILLMAN STREET.

Southwest corner of Second street. Southeast corner of Hill street.

HOWLAND STREET.

Northeast corner of Second street.

IRVING COURT.

North end of court.

KEMPTON STREET.

Southwest corner of Pleasant street.
South side, head of Hill street.
Southwest corner of Summer street.
Southwest corner of Emerson street.
Southwest corner of Park street.
Southwest corner of Liberty street.
Southeast corner of Jenney street.
South side, west of Hunter street 50 feet. Post.
Southwest corner of Francis street. Post.

KILBURN STREET.

North side, east of Front street 244 feet. Post. North side, east of Front street 581 feet. Post.

LIBERTY STREET.

West side, south of Kempton street 339 feet.

LINCOLN STREET.

West side, south of Union street 171 feet.

LINDEN STREET.

South side, west of State street 13½ feet. Post. South side, west of County street 169 feet. Post. South side, east of Ashland street 343 feet.

LINDSEY STREET.

West side, south of Kempton street. Post. Northwest corner of Morgan street. Post.

LOCUST STREET.

Southwest corner of Chestnut street. Post. Southeast corner of Richmond street. Post.

LOGAN STREET.

Southwest corner of Acushnet avenue. South side, east of Acushnet avenue 400 feet. Southwest corner of Front street.

MADISON STREET.

Southwest corner of First street.

MAITLAND STREET.

South side, west of Cedar street 305 feet. Post.

MAXFIELD STREET.

Southwest corner of Second street. Post. Southeast corner of Chestnut street. Southeast corner of Spruce street. Southwest corner of Ash street. Post. Southwest corner of Pleasant street. Post.

MECHANICS LANE.

North side, east of Eighth street 206 feet.

MIDDLE STREET.

Southeast corner of Second street. Southeast corner of Sixth street. Double. South side, east of Cedar street 371 feet. Southeast corner of Chancery street.

MILL STREET.

South side, west of Hill street 191 feet. South side, west of Ash street 45 feet.

MORGAN STREET.

Southwest corner of Cottage street.

Mosher Street.

South side, west of County street. Post.

MOUNT PLEASANT STREET.

Southwest corner of Distributing Reservoir. West side, north of Durfee street 572 feet. Northwest corner of Durfee street.

MOUNT VERNON STREET.

South side, west of Mount Pleasant street 359 feet.

NEW BEDFORD BRIDGE.

North side, west from draw 44 feet. South side, west from draw 11 feet.

NEWTON STREET.

Northwest corner of Elm street. Post.

NORTH STREET.

Southeast corner of Acushnet avenue. Southwest corner of Foster street. Southwest corner of Hunter street. Post. Southeast corner of Second street. Post. Northwest corner of Pleasant street. Post.

OAK STREET.

South corner of Harrison street. Post.

ORCHARD STREET.

West side, head of Madison street.

PARK PLACE.

South side, west of Sixth street 306 feet.

PARK STREET.

West side, south of Kempton street 339 feet. Post. Northwest corner of Court street. Post.

PARKER STREET.

Southwest corner of Summer street.

PEARL STREET.

Southwest corner of Pleasant street. Post.

PENNIMAN STREET.

South side, west of State street 220 feet.

PINE STREET.

Northwest corner of Cross street.

PLEASANT STREET.

Southwest corner of Market street.
West side, north of William street. Post.
Northwest corner of Pope street.
Northwest corner of Austin street.
Southwest corner of Linden street.
Southwest corner of Weld street.
East side, opposite Sycamore street. Post.

POPE STREET.

South side, opposite North Oak street.

POTOMSKA STREET.

200 feet east of Prospect street and 91 feet north of south line of Potomska street. Group of three. Post.

PROSPECT STREET.

West side, south of Howland street 157 feet. Northwest corner of Grinnell street. West side, North of Potomska street 324½ feet. Post. Northwest corner of Potomska street. Post.

Purchase Street.

Northwest corner of Deane street. Post.
West side, opposite Oneko Mill. Post.
East side, foot of Clark street. Post.
West side, head of Logan street.
Northwest corner of Austin street.
Northwest corner of Merrimac street. Double.
Northwest corner of Pope street.
Southwest corner of Pearl street. Double.
Southwest corner of Campbell street.
West side, north of Maxfield street 343 feet. Double.
Southwest corner of Hillman street. Double.
Southwest corner of Mill street.
Northwest corner of Middle street.
Northwest corner of Mechanics lane. Post.
Northwest corner of Union street.

REYNOLDS STREET.

Southwest corner of Weld street. Post. West side, north of Weld street 268 feet. Post.

RIVET STREET.

Southwest corner of Second street.

ROBESON STREET.

Southwest corner of County street.
Southeast corner of Cedar street. Post.
South side, west of Cedar street. Post.
Southwest corner of Ashland street. Post.

ROCK STREET.

Southwest corner of Washburn street. Post.

ROCKLAND STREET.

Southeast corner of Hall street. Post. South side, west of Orchard street 13 feet. Post. South side, east of Dartmouth street 162 feet. Post.

ROUNDS STREET.

West side, south of Kempton street 295 feet. Post.

RUSSELL STREET.

South side, east of Fifth street 92 feet.

SECOND STREET.

Northwest corner of Mill street.

West side, south of Elm street 52 feet. Post.

West side, south of Spring street 74 feet.

Northwest corner of Coffin street.

West side, at head of Morgan's lane. Post.

West side, North of Grinnell street 61 feet.

West side, north of Potomska street 232 feet. Post.

West side, north of Potomska street 122 feet. Post.

West side, south of Blackmer street. Post.

SEVENTH STREET.

West side, north of Madison street 50 feet. Southwest corner of Union street. Post.

SHERMAN STREET.

South side, west of County street 314 feet.

SIXTH STREET.

Southwest corner of William street.
Southwest corner of School street.
Northwest corner of Madison street.
Southwest corner of Russell street.
Northwest corner of Wing street.
West side, north of Grinnell street 194 feet.

SMITH STREET.

Southwest corner of Chestnut street. Double. Southeast corner of Spruce street. Double. Southeast corner of Emerson street. South side, west of Emerson street 404 feet.

SOUTH STREET.

Southwest corner of Acushnet avenue. Southwest corner of Second street. Southwest corner of Prospect street.

SPRING STREET.

Southwest corner of Seventh street.
Southeast corner of Fifth street.
Southeast corner of Acushnet avenue. Post.

STATE STREET.

Northwest corner of Sycamore street. Southwest corner of Pearl street. Southwest corner of Franklin street. Northwest corner of Merrimac street.

SUMMER STREET.

Southwest corner of Willis street. Northwest corner of Hillman street. Northwest corner of North street.

SYCAMORE STREET.

Southwest corner of Thomas street. Southwest corner of Summer street. South side, west of Ash street 68 feet.

TABER'S WHARF.

South side, north of Union street 36 feet.

THOMAS STREET.

Northwest corner of Hillman street.

THOMPSON STREET.

South side, east of Hall street. Post.

TREMONT STREET.

West side, south of Arnold street 287 feet. Southwest corner of Union street. Post.

Union Street.

Southwest corner of Water street. Double. Southeast corner of Second street. Southwest corner of Acushnet avenue. Double. Southwest corner of Sixth street. Double. South side, west of Park street 344 feet. Post.

WALDEN STREET.

Southwest corner of Maxfield street.

WALL STREET.

South side, east of Acushnet avenue 165 feet.

WALNUT STREET.

Northwest corner of Front street. Post. Southwest corner of Second street. Southeast corner of Fourth street. Double. Southwest corner of Seventh street.

WAMSUTTA STREET.

South side, east of Acushnet avenue 285 feet. Double. South side, east of Front street. Post. South side, east of Front street. Post.

WASHBURN STREET.

Southeast corner of Acushnet avenue. South side, west of North Front street 228 feet.

WASHINGTON STREET.

Southeast corner of Crapo street. South side, west of Orchard street 102 feet. Southeast corner of Dartmouth street.

WATER STREET.

Southwest corner of Hillman street. Southeast corner of North street. Post. West side, south of North street 258 feet. Northwest corner of Middle street. Double. Southwest corner of Elm street. West side, north of Centre street 46 feet. West side, north of School street 22 feet. Northwest corner of Walnut street. Northeast corner of City wharf. Northwest corner of Coffin street. West side, head of Leonard street. Double. Northwest corner of Howland street. Northwest corner of Grinnell street. Northwest corner of South street. West side, north of Potomska street 31 feet. Northwest corner of Rivet street. Southwest corner of Blackmer street. Southwest corner of Delano street. West side, south of Division street 285 feet. Southwest corner of Cove street.

WELD STREET.

Southwest corner of State street. Post.

WILLIAM STREET.

Southwest corner of Eighth street. Southeast corner of Acushnet avenue. Southwest corner of Bethel street.

WILLIS STREET.

Southwest corner of State street.
South side, east of Summer street 200 feet. Post.
Southwest corner of Cypress street. Post.
South side, west of Cedar street 200 feet.
Southeast corner of Pleasant street. Post.

WING STREET.

Southwest corner of Fourth street.

Winsor Street.

South side, west of County 300 feet. Post.

LOCATION OF RESERVOIRS.

Durfee street, southeast corner of Shawmut avenue. Linden street, northeast corner of Ashland. Franklin street, southwest corner of State. Willis street, northeast corner of State. Campbell street, west side of Purchase. Smith street, southeast corner of Cypress. Pleasant street, between Maxfield and Sycamore. County street, southeast corner of Maxfield. Pleasant street, southwest corner of North. Chestnut street, between Mill and North. Mill street, southwest corner of Purchase. Kempton street, between Cypress and Cedar. High street, near northeast corner of Foster. Middle street, near southeast corner of Purchase. Middle street, west of Grammar school. County street, front of M. E. Church. North Second street, northwest corner of William. City Hall square, west of hall. Court street, near head of Orchard. Union street, southwest corner of County. Union street, southeast corner of Fourth. School street, northwest corner of Fourth. South Second street, northwest corner of Walnut. South Sixth street, northwest corner of Walnut. Orchard street, east side, below Hawthorn. Russell street, between County and South Sixth. Acushnet avenue, southeast corner of Cannon street. Bedford street, southeast corner of Fifth. South Sixth street, southwest corner of Wing. Howland street, corner of Acushnet avenue. Acushnet avenue, southeast corner of Grinnell street. Washington street, northeast corner of Crapo. South First street, southwest corner of South.

INVENTORY OF CITY PROPERTY

IN POSSESSION OF THE FIRE DEPARTMENT AND IN USE, JANUARY 1, 1887.

BUILDINGS, APPARATUS, ETC.

5 brick engine houses.

1 wooden engine house.

8 steam fire engines (3 old.)

1 hand fire engine.

9 horse hose carriages.

3 sleigh hose reels.

1 hand hose carriage.

2 hook and ladder trucks (1 old.)

10,400 feet $2\frac{1}{2}$ inch cotton hose.

20 horses.

250 feet hand hose.

10 pairs double harnesses.

9 single harnesses and 1 lead.

33 horse blankets.

8 horse brushes.

8 curry combs.

7 mane brushes.

5 cards.

13 whips.

6 grain chests.

4 feed troughs.

13 pitchforks.

29 pails.

20 brooms.

3 hoes.

1 rake.

20 shovels.

13 pokers.

18 axes.

3 hatchets.

S iron bars.

19 halters.

6 sets lead bars.

5 leather buckets.

130 chairs.

3 bureaus.

4 sets hay hooks and blocks.

36 door keys.

13 mirrors.

14 bedsteads.

15 mattresses.

27 pillows.

51 pillow cases.

42 sheets.

28 blankets.

15 towels.

15 bedquilts. 11 bedspreads.

19 carpets.

7 clocks.

136 tower ropes.

100 feet hose rope.

4 suction hose ropes.

1 spare hook and ladder pole. 167 firemen's badges.

2 powder house keys, bag and fuse. 1 rope for fire hooks.

6 dust pans. 6 dust brushes.

5 floor brushes.

5 scrub brushes.

2 tube brushes.

7 mops.

7 feather dusters.

32 baskets.

4 wood saws.

4 saw horses.

4 grate patterns.

7 step ladders.

11 settees.

4 American ensigns.

41 lanterns.

5 stoves and pipes.

2 spare engine poles.

1 leather cover for Franklin Hose.

5 coal hods.

11 brass hydrant connections.

15 iron hydrant wrenches.

28 discharge pipes. 65 discharge nozzles. 59 leading hose wrenches. 38 engine wrenches.

6 jackscrews and bars.

6 work benches.

7 iron vises.

11 oil cans. 10 oil feeders.

4 waste boxes.
6 connections, $2\frac{1}{2}$ to $4\frac{1}{2}$.
1 connection, 2 to $2\frac{1}{2}$.
18 pump leathers, extra.
5 hose troughs.

13 hose brushes. 5 pipes for hand hose. 14 wrench belts.

10 wheel fenders.

1 iron kettle.

2 copper tanks, (1 old.)

4 watering pots. 12 grain measures.

1 box eastile soap.

7 chamois skins. 5 lbs. sponge.

7 wagons with poles and shafts.

65 coal baskets.

6 sets blocks and falls.

7 wagon jacks.

28 ladders, from 10 to 65 feet.

8 fire hooks and pikes.

2 tube scrappers.

8 ropes, (Hook and Ladder.)

3 stands.

12 spittoons. 2 wardrobes.

1 window brush.

1 water cooler.

3 soap dishes.

3 mugs.

6 cold chisels.

4 stable gongs.

SUPPLIES AND MATERIAL ON HAND.

1 waste box.

4 pump leathers, extra. 2 wheel fenders.

5 extra wheels for engines.

1 gate wrench. 11 taps.

4 spare grates. Nos. 1, 2, 4, 5. 1 box fire extinguisher chemicals.

9 fire extinguishers.

1 set horse slings.

1 set sleigh runners.

6 safty valve springs.
5 new couplings, full set.
5 new couplings, half set.

1 grindstone.

1 draw shaver.

1 jack plane.

1 pair rivet cutters.

1 lot patterns for doors, etc. 6 lbs. rubber packing.
1 water test gauge.
2 iron tool boxes.

2 engine heaters.

35 lbs. cotton waste.

3 sets flue tools.

2 cords wood.

20 lbs. cordage. 3 bars harness soap.

10 valve springs.

1 set badge dies.

2 quires emery paper. 3 glass tubes—water gauge.

20 lbs. rock salt.

1 suction strainer.

1 engine spring, No. 3. 2 engine springs, No. 2. 1 tunnel.

1 two-quart measure. 4 tons of hay.

 $\frac{2\frac{1}{2}}{2}$ tons of straw. 30 bushels of grain.

4 P. S. ropes.

1 spare steam gauge.

1 set tube expanders.

1 set repairing tools and chest.

1 set relief valve connections.

15 lbs. washer leather.

3 boxes disinfectant.

1 sledge hammer.

1 hand saw.

1 washer cutter. 1 bitstock.

1 pair compasses.

5 brass gauge cocks.

12 new copper tubes.

24 copper rings for leading hose.

1 gate for steamer No. 2. 1 lb. hemp packing.

13 galls, petroleum oil, and can.

10 galls, sperm oil, and can. 7 galls, neatsfoot oil, and can.

119 feet 4½ inch suction, good. • 10 sets new hose coupling.

1 spare axle.

1 machine to put couplings on. 25 tons Cannel coal.

15 tons coal for engine house.

5 pounds rotten stone.

5 spring locks, 30 keys. 1 set weighing scales.

3 tube brushes. 6 scrub brushes.

50 pounds common soap.

8 boxes Green Mountain ointment.

24 dozen candles.

1 carpet sweeper.

ENGINEERS' OFFICE FURNITURE.

1 carpet.

1 desk.

1 book case.

1 copying press.

1 table. 1 elock.

6 chairs and cushions.

1 swivel chair. 1 marble top sink.

1 gas drop light. 14 framed pictures.

1 looking glass.

1 city map. 6 towels.

1 comb and brush.

1 broom.

1 dust pan and brush.

1 carpet sweeper.

1 small feather duster.

1 stove, with copper pipe.

2 pieces oil cloth.

1 coal hod and shovel.

2 foot mats.

2 spittoons.

FIRE ALARM TELEGRAPH AND SUPPLIES.

51 alarm boxes.

24 miles of line wire.

9 bell strikers.

8 15 inch gongs.

1 10 inch gong.

11 7 inch gongs.

3 repeaters.

2 switch boards.

1 repeater switch.

1 battery rack.

150 cups in battery.

1 hydrometer.

1 rubber syringe.

1 thermometer.

3 tapper gongs.

13 church door keys.

320 alarm box keys.

I copper hand basin.

5 screw drivers.

5 pairs cutting pliers.

1 axe.

1 chemical extinguisher.

2 vises and straps.

2 tool belts.

1 pair pole climbers.

3 gimlets.

1 bit and stock.

2 hammers.

1 monkey wrench.

2 iron bars.

1 2 extension ladders.

2 sets steel letters.

1 small pipe wrench.

5 tin oiler pans, for bell strikers.

2 shovels.

1 posthole spoon.

2 paint brushes.

1 life line.

1 soldering kettle.

1 iron melting pot for zine.

1 plaster hook.

1 iron ladle.

1 iron mould for zinc.

1 bull's eye lantern.

13 battery cups, spare.

1829 lbs. sulphate of copper.

250 battery zines.

20 hangers for zinc.

1331 lbs. iron ware.

45 glass insulators.

12 hook insulators.

35 iron brackets.

2 spare poles.

11 alarm box hinges.

1 alarm box magnet.

1 15 inch gong magnet.

6 old leather fire buckets, date 1829.

3 paper alarm registers.

3 Pierce & Griswold registers.

.1 iron tackle block for bell striker.

PROTECTING SOCIETY.

20 rubber covers, 8×12 .

5 rubber covers, 8 x 15.

6 squilges. 4 ladders.

1 piano harness.

175 cover hooks.

2 cartridge boxes. 2 steel hammers.

2 screw drivers and sheaths.

REPAIR SHOP.

1 brick shop.

1 portable forge.

1 set pipe dies and taps, from \(\frac{1}{4} \) to 1 inch.

2 pipe cutters.

1 bench and vise.

1 set pipe dies and taps from $1\frac{1}{4}$ in. to 2 inches.

8 bolt taps.

100 lbs. wrenches.

2 sets tube expanders.

6 files.

3 gross screws.

1 set tap wrenches.

1 large monkey wrench.

1 small monkey wrench.

1 hammer.

1 Stillson pipe wrench, 24 in.

1 Stillson pipe wrench, 12 in.

1 Stillson pipe wrench, 8 in.

150 lbs. nails. 3 cold chisels.

12 file handles.

1887-CITY DOCUMENT No. 6.

ANNUAL REPORT

OF THE

SCHOOL COMMITTEE

OF THE

CITY OF NEW BEDFORD,

TOGETHER WITH THE

SUPERINTENDENT'S ANNUAL REPORT,

FOR THE YEAR 1886.

NEW BEDFORD:
MERCURY PUBLISHING CO., CITY PRINTERS.
1887.



REPORT.

By direction of the School Committee, I submit to our fellow-citizens the following Report for the year 1886.

STATISTICS OF THE SCHOOLS.

I. POPULATION.

The population of the city (census of 1880) was	26,875
School census, May, 1883, (children between 5 and 15 years	
of age,)	5,131

The whole number of different pupils enrolled during the year has been 5060. About 300 were withdrawn at the beginning of the present term to attend the French Parochial school; yet the attendance during the term has been 4586, against 4683 last year. This slight difference exhibits the city's rapid growth.

II. SCHOOLS.

High, Grammar, Primary,	11	1 4 3
Country, Mill,		6
Farm,		1
Total,	$\frac{-}{2}$	

4	CITY	DOCU:	MENT	No.	6. Jan	uary,
	III.	SCHOOL	BUILDI	NGS.		
Number of build	dings own	ed by the	eity,			25
	ROOMS U	USED FOR	SCHOOL P	URPOSE	s.	
High, Grammar,					1	15 41
Primary,						59
Country,						9
Mill, Drawing,						4
Farm,						1
	Total,					130
			· ·			
		IV. TEA	CHERS.			
High school,						10
Grammar school	/				•	. 40
Primary schools. Mill schools,	,					$\begin{array}{c} 54 \\ 3 \end{array}$
Country schools,		·				10
Evening schools						21
Farm school,						1
Special teachers,						. 5
,	Total,					144
	V. PUP	ILS. (FA	LL TERM	1 , 1886.	.)	
	WHOLE	NUMBER	OF ALL A	GES IN		
		GIRLS.	В	oys.	AGGREC	GATES.
High school,		212		136	348	
Grammar schools		800		782	1,582	
Primary schools,		1,118	1.	,054	2,172	
Country schools,		146		150	296	

170

18

4,586

Total, Against a total of 4,683 last year.

Mill schools,

Farm school,

NUMBER OVER FIFTEEN YEARS OF AGE.

High school,	279
Fifth street school,	35
Middle street school,	33

1887.	SCHOOL REPOR	RT	5
Parker street school, Acushnet school, Plainville school, Arnold street school, Cannonville school,			36 2 2 1 1
Tota	1,		389
Number under five	years of age, none.		
INCREASE OR	DECREASE IN THE SEVER	RAL DEPARTMENTS.	
High school, (increa Grammar schools, (i Primary schools, (de Country schools, (in Mill schools, (decrea	ncrease,) crease,) crease,)	25 57 38	100 110
Farm school, (decrea	ase,)	-	2
Aggregate decrease	e, 92.	120	212
	AVERAGE NUMBER BELON	GING.	
High school, Mill schools,			334 170
Grammar schools:			
Fifth street, Middle street, Parker street, Thompson street, Tota Against a total of	l for grammar schools, 1,455 last year.		448 385 461 130 1,424
Primary schools:			
Acushnet avenue, Arnold street, Cedar street, Cedar Grove street Dartmouth street, Fourth street, Grove, Kempton street, Linden street,	,		236 33 204 129 137 171 173 162 120

6	CITY	DOCUMEN	T No. 6.	Jan	uary,
Merrimae stre Maxfield stree Thompson str William stree	et, reet, t, Total for	primary schools,		·.	110 139 110 148 1,872
		iast year.			
Country schools	3:				
Acushnet, North, Rockdale, Plainville, Cannonville, Clark's Point	,				93 29 29 18 75 30
Against a tota		country schools, ast year.			244
	A	VERAGE ATTEND	ANCE.		
High school, Mill schools,	1	,			321 50
Grammar school	ois:				100
Fifth street, Middle street					426 365
Parker street	,				423
Thompson str					124
Against 1,383		grammar schools			1,338
Primary school	s:				
Acushnet ave	nue,				221
Arnold street	,				31
Cedar Street,	atmost				187
Cedar Grove Dartmouth st					116 127
Fourth street,					157
Grove,	7				163
Kempton stre	et,				153
Linden street					108
Merrimae stre	eet,				100

	•	
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Maxfield str	reet,	130
Thompson s	treet,	125
William stre	eet,	130
Against 1,83	Total for primary schools, 6 last year.	1,748
Country school	ols:	
Acushnet,		59
Cannonville	,	66
Clark's Poin	t,	. 28
North,		27
· Plainville,	,	16
Rockdale,		23
	Total for country schools,	219
Against 219	last year.	
	PER CENT. OF ATTENDANCE.	
High school,		.96
Grammar sch	ools,	.94
Primary scho		.92

REGULARITY OF ATTENDANCE.

.87

Country schools,

Whole number of Absences and Tardinesses (Half-Days) during the Fall Term, Sixteen weeks in Length, in the

High school,	ABSENCES. [days,] 1,043	TARDINESSES. 387
Grammar schools:		
Fifth street,	3,529	356
Middle street,	2,899	298
Parker street,	4,883	777
Thompson street,	1,744	219
Primary schools:		
Acushnet avenue,	2,133	180
Arnold street,	273	31
Cedar street,	2,106	143
Cedar Grove street,	1,395	143
Dartmouth street,	1,256	107

8	CITY	DOCUMENT	No. 6.	January,
Fourth street, Grove, Kempton street Linden street, Merrimae street Maxfield street Thompson street, William street,	et, eet,	1,5 1,1 1,2 1,5		206 326 107 109 148 151 218 279
Country schools	:			
Acushnet, Cannonville, Clark's Point, North, Plainville, Rockdale,		1,6 — :	480 334 215 381 872	12 195
	T	HE GRADED SCHOOL	Ls.	
	Nun	nber in the several Gr	ades.	
High school: Post graduates First grade, Second grade, Third grade, Fourth grade,	5,			3 50 62 90 143
Grammar school	ls:			
Fifth grade, Sixth grade, Seventh grade, Eighth grade, Ninth grade,				197 210 301 412 462
Primary schools Tenth grade,				430
Eleventh grade Twelfth grade	,			504 493
Thirteenth grad	ue,			745

COST OF INSTRUCTION PER SCHOLAR.

The statistics of this table, in conformity to the statute, include hire of teachers, fuel, care of school houses, books furnished by the city, and supplies in general, except

those from the income of the Howland fund. The basis of computation is the average number belonging to each school. The term "care of school houses" includes only the salaries of janitors.

The cost of maintenance of each scholar in the High school for the year has been	\$41.09
Grammar schools:	
Fifth street,	21.89
Middle street,	22.71
Parker street,	22.87
Thompson street,	11.65
Primary schools:	
Acushnet avenue,	14.28
Arnold street,	20.74
Cedar street,	14.92
Cedar Grove street,	21.76
Dartmouth street,	17.47
Fourth street,	17.56
Grove,	15.22
Kempton street,	16.44
Linden street,	20.07
Merrimac street,	26.07
Maxfield street,	19.07 8.75
Thompson street,	16.17
William street,	10.17
Country schools:	
Acushnet,	27.16
Cannonville,	15.34
Clark's Point,	29.84
North,	21.39
Plainville,	23.53
Rockdale,	19.48
The average cost of maintenance of a grammar scholar has been	\$19.78
Primary scholar,	17.57
Of a scholar in a country school,	22.79
Of a scholar in the Mill school,	17.24

No just comparisons can be instituted, based on this table, as to the degree of economy exercised in the differ-

ent schools; the circumstances of the various schools are so different. Some schools have a much smaller number of scholars to a teacher than others, and this circumstance greatly increases the comparative cost per scholar. Still again, the methods of heating some of the school houses involve a much greater expense for fuel and oversight than is the case with others, with similar results as to the comparative cost.

Respectfully submitted.

H. F. HARRINGTON,
Superintendent.

EXPENDITURES.

The Committee on Expenditures herewith submit their Report for the year 1886, as follows:

RECEIPTS.

From annual and special appropriations:

For teachers' salaries,	\$75,900.00	
Incidentals, (including text books,)	22,259.54	
Repairs,	5,200.00	
	\$103,359.54	
Dog fund,	400.00	\$103,759.5

PAYMENTS.

For teachers' salaries,	\$75,870.24	
Incidentals, (including text books,)	22,267.26	
Repairs,	$5,\!206.86$	
Rent of superintendent's office, and pay of		
janitor for the same,	400.00	103,744.36
Balance unexpended,		\$15.18

It is a material point in this connection that because of an abridgment of the Fall term of 1885 from 16 weeks to 15, an extra week was added to the school year of 1886, making 41 weeks instead of the allotted period of 40 weeks.

This proportionately increased the expenses of the year. There has been received from non-resident pupils the sum of $$403\frac{1.8}{100}$, which has been paid by your Committee to the city treasurer, and placed by him to the credit of unappropriated funds.

Thompson street school house:

Balance from last year, \$1,125.68

Payments on this account, 1,124.98

Balance unexpended, \$.70

The Committee would recommend that the city government be requested to furnish the superintendent with a suitable room for an office, or appropriate funds to pay the rent of his present office, so that this Committee will not be obliged to use a part of the dog fund for that purpose. That fund is not set apart by the State to defray any expenses of the kind.

Submitted for the Committee.

WM. H. MATHEWS, Chairman.

HIGH SCHOOL - 1886.

It is well known that for several years there has been a steady and material increase in the number of pupils in the school; and the forces that have led to it are still existent and active. At the beginning of the present school year there were 337 pupils, and this number has been increased to 348. At the corresponding time last year there were 317.

It is not my intention at the present time to discuss the causes of this growth, but to call attention to the fact that they are not ephemeral, and that the further increase they will occasion will require an additional room and also an additional teacher. Already the seating capacity of the

three rooms of the Fourth grade is taxed to its utmost limit, and additional seats have been placed in the rooms of the First and Third grades.

Partial relief has been afforded in the upper grades by the system of elective studies and of special teaching, but the classes of the Fourth grade remain in their several rooms during the entire session.

Rooms originally intended for from forty to forty-two pupils are now seating from forty-six to forty-eight. This, of course, places additional burdens on the teachers, of which the Committee are mindful; but they have not, as yet, thought it expedient to take measures for their relief by asking for increased accommodations.

Complaint has been made that noxious fumes from the chemical laboratory sometimes impregnate the atmosphere of the building. This is an evil which, if possible, should be speedily remedied. It is quite difficult to suggest, however, how a remedy can readily be applied. The laboratory, which, for experimental instruction in general chemistry, is probably unsurpassed by any other in the state connected with a public school, is located in the basement. Careful provision was made in its construction, it was thought, to carry off all offensive odor and gases by means of ducts opening into a flue whose discharging aperture is above the roof. But nature has certain laws which it insists on maintaining, and if we infringe them they will nullify all our artifices. This flue is not heated, and the laboratory being so, the current of air is downward instead of upward, and the gases are discharged into the building.

I content myself with simply adverting to this difficulty. Unless an upward current can be established in the flue, the present position of the laboratory will continue to be unhealthful.

As stated by the Committee of last year in their annual Report, the organization of the school, so far as it related to the three upper grades, was changed in the midst of the fall term. In place of the old method by which the several classes were each assigned to a teacher who had charge of all its studies, the work of instruction was distributed among the teachers as specialists. Under this arrangement, which, in the main, worked smoothly, it was found that the teaching force in the school was inadequate, and the Board, upon recommendation of the Committee, appointed Mr. Nathaniel Hathaway as instructor in the scientific department.

Mr. Hathaway entered upon his duties in January, at the beginning of the Winter term. Under his able direction the study of chemistry, by this time made elective and taught on the experimental plan, was pursued with far greater advantage to the pupils than ever before. In the required study of physics, however, the work was far from satisfactory. This evidently arose from no fault in the teacher, but rather from the method of teaching prescribed. To secure results commensurate with the importance of the subject, it was clearly shown that the study must be placed on the same basis as the chemistry. I shall have occasion to refer to this subject again under another head.

Mr. Hathaway's stay in the school, however, was limited. Engagements made prior to his appointment as teacher, which it was thought would not interfere with his duties in the school, demanded so much of his time, that he reluctantly, and much to the regret of the Committee, was obliged to resign at the end of the school year.

Mr. Charles R. Allen, of this city, was appointed as his successor, and entered upon his duties at the beginning of the present school year. The Committee deem themselves fortunate in securing the services of one so

thoroughly well posted, and so enthusiastic in the development of the department over which he has been elected to preside.

In the month of May, Mr. Charles P. Rugg, who for twenty-five years had been principal of the school, faithfully and conscientiously performing the arduous duties of that position, tendered his resignation.

The Board, while accepting the same, unanimously requested him to remain until the close of the school year, and at that time he retired with heartfelt wishes for his future health and prosperity.

The Committee, with a full sense of the responsibility devolving upon them, and with a determination to secure the best available man as a successor to Mr. Rugg, carefully and deliberately examined the qualifications of some of the most prominent teachers in the state. They selected and recommended to the board Mr. Ray Greene Huling, principal of the Fitchburg High school, and that gentleman was duly elected to the position. They believed that in Mr. Huling they had secured a man of ripe scholarship, of sound judgment and of kindly manners, with an extended experience as a most successful high school master; and that he was a man who would bring to the position just those qualities, moral and mental, that were needed to elevate the tone of the school, and produce a stimulating effect upon the minds of the pupils.

It is enough to say, at this time, that the Committee have in no particular been disappointed.

In my visits to the school early this year, I noticed on the part of many pupils, in all the grades, an indifference to study and a disregard of the rules of discipline that surprised me.

Inquiry revealed the fact that there was in the school

quite a number of pupils, who, perhaps, ought never to have been admitted; certainly they were not qualified to pursue the course of study prescribed. What seemed, at first glance, indifference, proved in reality to be inability to comprehend and grasp the subject matter of their several studies. They possessed but limited powers of application; and, unable properly to prepare their lessons, they took but little interest in the recitations.

Why had such pupils been admitted to the school? It was through a modification of the conditions of admission enacted some years since, whereby the rule prevailing in the grammar schools, by which the pupils of the several grades were advanced each year "in mass", was applied to candidates for the High school, and the entire fifth grade of the grammar schools had been annually admitted without condition or question, except in cases of extreme unworthiness.

I cannot but think this basis of admission a mistake. It may be proper so far as the primary and grammar departments are concerned, and, in that connection, I understand, works well. But the conditions are radically different in the one case and the other. When pupils are to enter the High school, and undertake the higher branches of education which make up its curriculum, it seems to me that some adequate preparation, some positive qualifications, some degree of mental fitness, should be required.

The Committee have taken this view of the matter and voted that, hereafter, the modification which had been in operation should be rescinded.

Another, and a still worse result of this management, was that this apparent indifference on the part of the pupils had proved contagious and had infected quite a number, who, under other circumstances, amid other surroundings, would have been fair or even good scholars. It may be asked, Why was such a state of affairs allowed to exist? I reply that the teachers were utterly helpless.

No penalty, or next to none, attached to any failure in the daily work or occasional examinations. A belief, based upon actual experience and precedent, was universal among the pupils, that they could drift along, doing almost nothing, and, advancing year after year with their classes, finally graduate with as tangible proofs of good scholarship as those possessed by the pupils who had conscientiously, enthusiastically and successfully completed the course.

Was this right? Again the Committee, after careful consideration, decided that it was not. They accordingly voted that, hereafter, a certain amount of correct work in daily recitation and occasional unannounced examinations would be required to secure promotion and a diploma at the end of the course.

It is not to be inferred from this action of the Committee that they advocated, in general, a return to the old system of daily marking. They were well aware that, to a certain extent, it would hamper the teachers, and so they explicitly stated that this marking was to be presented in the form of a weekly report founded on their impressions and judgment.

A positive evil was existing in the school which it was essential to eradicate, and the adoption of this rule seemed to be the only available means by which that result could be secured. It was resorted to solely as a specific, applicable to this case alone. As soon as it shall be shown that some other stimulus will act as effectively, that other influences will be as successful, the Committee will be ready for its abandonment.

That its adoption has had, in the main, a remedial effect is undeniable. That the general tone of the school has been elevated is also true. Nothing unreasonable has been exacted, nothing more demanded than is required to establish those habits of application, and to develop those powers of reasoning, which boys and girls, on the verge of manhood and womanhood, should possess.

The lack of discipline noticed at the beginning of the year has, through the position taken by the Committee and the good influence of the principal, in a great measure disappeared, and no further apprehension for the welfare of the school from this source need be felt.

I have thought it my duty to speak of the evil of which I have been treating in positive terms, because it has been, in truth, a serious interruption to the healthful progress of the school, and because the decided change which has consequently been instituted in the conditions of admission required explanation. But I should do gross injustice to the school if I left the impression that its merits have not far outweighed its defects.

The unqualified and reckless pupils, injurious as their unscholarly habits have been, have formed only a minority. Contrasted with them, and giving the prevailing tone and character to the school, has been a large per cent. of able, industrious and self-respecting pupils, whose scholarship has been as excellent as their conduct has been irreproachable. As a whole, the school has been a credit to the city, an institution worthy of high commendation, and one that has given admirable mental training to many of our youth.

For several years those most intimately acquainted with the school have felt that the curriculum was not the best that could be devised to secure the object sought, viz.: a sound and practical education.

The chairman of the High School Committee two years ago, referring to this subject, so well and clearly stated this defect and the evils resulting from it, that I take the liberty of quoting that portion of his report. Speaking of the freedom of choice of studies allowed the pupils, he says:

"How wide a margin should be given to the pupils in the High school to elect the studies which they will pursue? When the present curriculum was under discussion, this question was carefully considered; and it was finally determined to make the studies of the first two years imperative, leaving a freedom of choice between Latin and history, the subjects assigned being those essential to a sound, practical education.

"During the last two years, with the exception of language, which was made imperative for all the pupils throughout the course, and Latin, which was enforced upon those who had selected it in the beginning, there is almost unrestricted freedom of choice among the various subjects included in the curriculum. It proves to be a The choice of many pupils being dangerous freedom. dictated by fancy or caprice, they often select studies for which they have no real taste or aptitude, and soon tiring of them, long to throw them aside. To a corresponding extent they avoid those which would be of solid advantage; hence, in after years they are often mortified at their ignorance of matters with which a good education should have made them acquainted. School instruction should not prove desultory, and therefore comparatively valueless, through this frittering away of time upon an incongruous jumble of studies, but should be thoroughly systematic and disciplinary; one part carefully adjusted to every other, making a consistent whole, adapted to furnish the intellect and mould the character, in preparation for the responsible duties of life. I therefore suggest whether it would not be wise still more fully to restrict the election of studies, since the pupils fail so largely to do justice to themselves."

The attention of the Committee was attracted, early in the year, to the importance of this subject, and the pressing need of legislation. After some consideration the matter was referred to a sub-committee with instructions to prepare a new curriculum, which should conform more closely than the old one to the requirements and possibilities of the new plan of special teaching, and which, by restricting the freedom of choice of studies by the pupils, would yield more positively beneficial results. Such a course, it is believed, was prepared, adopted and put in partial operation at the beginning of the school year in September.

Among the innovations is the establishment of a new course of study, known as the collegiate course. Heretofore all the studies of the school had been included in one general course, and pupils preparing for college had been permitted to elect such as were requisite for this purpose. While such a plan, under the guidance of competent teachers, secured the object sought, it is obviously certain that pupils will be better prepared for admission to the higher schools, and better equipped for the work in them, by a well arranged, systematic course of instruction having from the start this result in view.

Latin has been dropped from the studies of the first year in the general or English course, because it was believed that its selection was actuated in many instances simply by fancy or caprice on the part of the pupil. In most of these cases, the pupil, having no aptitude for the study, found it a serious hindrance to good work in other directions. At the beginning of the second year with minds more mature, and the nature of high school work better understood, the selection of Latin, if made, will be influenced by sounder considerations.

Book-keeping has been placed among the studies of the second year instead of the fourth as formerly, because of the fact that many pupils leave the school at this time, and that to such, some knowledge of accounts may be of great service.

A thorough course in physiology has also been assigned to this year for similar reasons.

The study of natural philosophy has been changed from

the second to the third year, to be followed and supplemented in the fourth year by the study of chemistry. A radical change has been made in the manner of conducting the former study.

Heretofore it has been required of all the pupils of the Third grade. The classes have been large and unwieldy, having from 40 to 50 pupils in each, and the results consequently meagre and unsatisfactory. Under the new arrangement it is required of the boys only, and they are divided into two classes of about twenty each. This diminution in the size of the classes not only secures a far greater amount of direct individual instruction, but renders possible that experimental work by the pupils which is the only medium of accurate and thorough knowledge.

The study may be elected by the girls of the same grade, but, failing so to elect, they are required to take up zoology the first part of the year, to be followed by the study of botany for the remainder. These are the most important changes which have been made; and with the exception of "English language and literature", the methods of prosecuting which are not yet defined and adjusted to our own satisfaction or that of the teachers, it is believed that the work of the school is in progress, in all regards, on an intelligent and satisfactory basis.

I have thus endeavored to set forth quite fully the legislation of the past year which the High School Committee have deemed necessary to put the school on the best possible footing for the ends which it is expected to accomplish. The Committee feel that they have reason to congratulate the community on the very favorable conditions under which the school is now moving forward in its work.

With a corps of teachers of acknowledged ability and skill, with subjects and methods of study adjusted to combine as far as possible practical usefulness with mental discipline and broad acquirements, and with appliances

which the liberality of the School Board and the resources of the Howland fund have supplied, the great good which this department of our public school system has achieved in the past will suffer no diminution in the products of the future.

For the High School Committee.

JOHN ELDRIDGE, JR., Chairman.

GRAMMAR SCHOOLS.

The progress of the grammar schools during the past year has been so regular and uneventful, that were it not for one or two instances in which the action of the Grammar School Committee has been sharply criticised in the Board, and of which it is proper that the circumstances should be clearly and fully stated, there would be nothing of special interest to record.

One of these instances relates to the manner in which diplomas were distributed at the close of the school year in June, to the members of the graduating class.

In the month of January, 1884, the Board authorized the Grammar School Committee to procure diplomas and confer them on the members of the successive graduating classes "who should honorably finish the course of study prescribed for the grammar schools."

The basis for the first award of the diplomas was made very broad and liberal; so that almost all the pupils of the graduating classes of that year came into possession of them. It seemed to the Committee, on mature reflection, that this free way of conferring the honor would be sure to destroy the benefit which was the express object of its institution; which was, to excite an earnest ambition to excel by holding up an honorable testimonial as the reward to be attained by faithful and meritorious endeavor.

But if nominal limitations only were to be imposed in regard to qualifications for this reward—if so little effort were to be rendered necessary for its attainment that the great majority of every class could look forward to it with confidence, as something to be had as a matter of course,—it would prove a nullity as a stimulus to good scholarship, and therefore a worthless institution.

For these reasons the Committee decided to require a certain per cent. of correct work, cast upon the results of three examinations in all the prescribed studies—two written and one oral—to entitle a graduate to a diploma.

The result was a great disappointment. The Committee had so carefully adjusted the per cent. to be required to the character of the examinations, in the effort to be fair and just, that it was supposed that only a small minority of the pupils would fail of success. But the number of failures was unexpectedly large. Certain drawbacks to success which might have been anticipated but were not, were largely accountable for the failures. Still, the basis had been formally established—the word of the Committee had been pledged,—and the result was adhered to as it stood.

Complaints of injustice ensued and the matter was brought before the Board. A motion was made that the requirement of an arbitrary per cent. as imposed by the Grammar School Committee, was inconsistent with the condition on which the right to confer diplomas was granted, viz.: that all graduates were to receive them who should honorably finish the course of study prescribed for the grammar schools. In support of this motion it was argued that there have been heretofore and would inevitably be in the future some members of every class, of limited ability or limited opportunities, who can not achieve a high percentage, but who, through patient industry, doing the best which it is in them to do, will honorably finish the course of

study in the very best sense. The merit of such pupils is not to be determined by arbitrary per cents., but by the degree of their fidelity to their powers.

A motion prevailed, requiring that in future the habitual character of a pupil's work should be made to supplement the results of test examinations, and then the whole subject was referred to the Grammar School Committee for their further consideration.

At a subsequent meeting of that Committee the matter was duly and candidly discussed. Actuated as they had been throughout to make the distribution of diplomas a valuable helper to the progress and standing of the schools, they were perfectly willing and ready to retrace any step in the premises which might have been a mistake; and frankly conceding the point to have been well taken that they had unjustly narrowed the terms which the Board had dictated as the basis for the award of the diplomas, they settled the controversy by the following retroactive vote, which was promptly carried into effect:

Voted.—That in compliance with the terms of the vote of the Board empowering this Committee to give diplomas to the graduating classes, diplomas will be granted to all the members of the class of 1886 who deserve them by those terms.

Another instance in which the legislation of the Grammar School Committee has not been satisfactory to all the members of the Board is in connection with a standing rule of the Committee that the grammar schools are not to be dismissed for the afternoon, on any occasion, on account of the prevalence of a storm at the close of a morning session, without the approval of the chairman.

The Committee have been led to this enactment by the following course of reasoning. They start with the trite but essential proposition that education being one of the

most important pursuits in the life of youth, its opportunities are not to be lightly valued nor recklessly abridged. The schools are the established means to confer this priceless possession, and the large outlay by which they are supported manifests the profound sense in the community of their vital importance. A weighty responsibility, therefore, rests on those who control them to maintain them always in operation, except when it can be clearly shown that unqualified advantage will be derived from their suspension. For every instance of suspension is so much subtracted from the gross amount of the service which they render to the great cause.

Now, is a rain or snow-fall, even though severe, good cause for the suspension of the schools? The majority of the Grammar School Committee do not think it is.

In the first place, a large per cent. of the pupils can attend without the slightest injury or inconvenience, even in the face of a driving storm. Wrapped in the protective garments which the most of them possess, the girls who live near their school house, and even those who live quite a distance away, can encounter the elements unharmed. As for the boys, they can scamper off to school as easily as,—should the schools be suspended—they would scamper off to play. It would seldom be the case, indeed, that these classes would not comprise a majority of each school; and we ask, Are they to be deprived of their opportunities of instruction, because a portion of their mates must remain at home? On what ground can such a sacrifice on their part be demanded with any show of consistency or justice?

Still, the demand is made with earnestness, and two arguments are advanced in support of it. One is, that there is a spirit of emulation in every class to be always present when the schools are in session, and that those whose health or other circumstances compel them to remain at home in a storm, are so fretted at thought of the effect on their

standing as to render it quite an injustice to subject them to the suffering. Now, when this argument is brought down to its lowest terms, what is its substance? We rejoice in every evidence of an active *esprit de corps* in the schools. The absence of it is a serious drawback to efficiency. We would not abate one jot of healthful emulation. But an emulation like that we are considering is surely morbid and unworthy. No teacher is justified in creating it; and the evil is to be remedied by enforcing regulations which will relieve those who must stay at home in storms of their sense of loss,—and not by duplicating the wrong by dismissing the whole school.

The other argument is, that it is useless for a portion of the pupils to attend school in a storm, for the portion who are absent disorganize and demoralize the class by their absence, prevent satisfactory attention to the allotted studies of the session, and render attempts at instruction a nullity.

We reply, that no stronger objection to our boasted graded system could be advanced than is compressed into this argument. If class work has become such a piece of mere mechanism that individuality is swallowed up in it, so that the absence of a considerable number of a class paralyzes the instruction, it is time that it were wholly abolished. And what a confession of weakness and inefficiency it would be for a teacher to plead in favor of suspending school in storms, that he or she—as may be—has no mental resources available to benefit those who may be present! The live teacher will embrace such occasions as exceptionally good opportunities for the best kind of instruction.

There are two minor arguments in opposition to the suspension of the grammar schools in the afternoon, when it is stormy at the close of the morning session, which have some weight but can be briefly dismissed. One is that a good part of the time it proves to be fair weather in the afternoon instead of the expected storm. The other is that the injury which must inevitably accrue to many pupils from exposures consequent on the advantage they take of freedom from school to engage in play, in defiance of the inclemency of the weather, might perhaps be found to offset in full the utmost injury sustained by any in attendance upon school.

For the Committee.
F. A. WASHBURN, Chairman.

PRIMARY SCHOOLS.

The intellectual work of the primary schools has not been subjected to any unfavorable interruptions or drawbacks during the year now closing; but their material condition has suffered from two causes.

One of these is the opening of the French Parochial school at the beginning of the Fall term. It took away a large number of pupils from the schools in the north part of the city, correspondingly reducing their numbers. The same schools suffered in like manner when the Irish Parochial school was opened, but they have nearly recovered from that depletion, the city is growing so rapidly; and it will not be many years before the seats which have lately been made vacant will all be filled again.

Thus it will be seen that in one sense certainly, the Parochial schools have been of signal advantage to the interests of the public schools. The two north Parochial schools have an attendance of about 1200; and it can easily be seen that were those pupils still dependent on the city for their schooling, a large increase of school accommodations would have been required.

The other cause of difficulty is of precisely the opposite character, and has affected the schools in the centre and south parts of the city. The wide spread improvements toward the west, the opening of new streets and multiplication of new houses in that direction, as well as an appreciable increase in the older sections of the city, have poured a crowd of children into the central schools until their numbers have nearly reached the limit of their possible accommodations.

At the south, the new Parochial school has afforded some relief from pressure, but the Thompson street school house is quite full, with a large number of little ones counted up, who, when the genial airs of Spring arrive, will be untied from their mothers' apron strings to be sent to those convenient nurseries, the Thirteenth classes of the primary schools.

The indications all point towards the absolute necessity at the opening of the Spring term, for the occupancy of the fourth room in the Thompson street school house by the primary children, which room is now used for a class of the Mill school.

If I may be allowed to make a suggestion to the city council, it is that a school house is imperatively demanded somewhere near the intersection of Kempton and Chancery streets. There is no primary school house now between Cannonville and the Kempton street house from east to west, and between Cedar street and Arnold street, from north to south. Yet much of the locality is crowded with dwellings, and the little children have to go long distances to school.

By another year there will be no room for them anywhere.

I was glad to hear the superintendent tell the primary teachers at a late meeting of the corps, that he is ready to commence the preparation of the primary portion of the manual which he has had in contemplation for some time.

The copies of the manual in present use are entirely exhausted, so that many of the teachers who have recently

entered our service have no authoritative guide to their labors. I would not have any teacher bound down severely to the dictation of a manual, at the expense of individuality, but there are manifest reasons why an authoritative hand book, stating principles, and suggesting methods, is of essential value.

I would suggest the advisability of having a sufficient number of copies of the detailed directions for primary teachers printed in advance of the completion of the whole volume, to supply this immediate demand.

Respectfully submitted.

ISAAC W. BENJAMIN,
Chairman of Primary School Committee.

MILL SCHOOLS.

During the past year there have been several important changes in the mill schools and while in the north school there has been a considerable reduction in numbers, yet in no way is its usefulness impaired, neither can any reflection be cast upon its management.

The good work done in this department commends it to the Committee for a prominent place in its consideration, educating as it does a class of pupils to whom a regular course of study is denied. Especially should it be fostered, for many go from its teachings who would lack that essential feature in a good citizen, an education, even though limited. It is not necessary to enter into details of the work done in this school. It is sufficient to say that it is all that it has been in the past, with the additional power that experience has given to its excellent corps of teachers.

The removal of the central school to its present location in the Thompson street building was in every way to be commended. First, because it placed the children within easy distance of their homes, and, again, the neatness and general surroundings have a marked effect upon their habits.

This school has increased in numbers and it would be detrimental to its interests if a change of location should be found necessary, and there would seem to be no just cause for removal, for these pupils are entitled to the same consideration as others.

The Report of this department for 1885 strongly recommends placing this school on the same basis as others with respect to vacations. There are many arguments offered in favor and many against such a change and without doubt the children would be benefited by it, for many of them coming from the mill directly into school lack energy necessary to enable them to successfully pursue their studies. But to many families it would bring great hardship and the matter should have thorough investigation before so important a change should be made.

The opening of the French Parochial school with its consequent draft upon our numbers necessitated the discharge of Miss MacFarlin at the north school. This teacher has been faithful in her work and the Committee regret the necessity for her removal.

Respectfully submitted.
ISAAC B. TOMPKINS, JR., Chairman.

COUNTRY SCHOOLS.

Two or three misfortunes have interrupted the onward course of the country schools through the past year.

During the last term the prevalence of diphtheria in the village of Acushnet induced the Board of Health to suspend the school for a fortnight. When, at the expiration of this period, the pupils were called together again, the

fear of exposure to this terrible disease prevented many from attendance for a considerable period, and the efficiency of the school was proportionately decreased.

It was with pain that in the early part of the Fall term the Country School Committee received the request of the teacher at Rockdale, Miss Tripp, for leave of absence during the winter on account of ill health. Their best wishes follow her for her recovery. Miss Turner supplies her place.

The country schools are beginning to share the prosperity of the city in a large increase of pupils.

For the Committee.

H. F. HARRINGTON, Secretary.

EVENING SCHOOLS.

The favorable anticipations in which we indulged a year ago, in reviewing the work of the evening schools, have crystalized into realities today, and we report with pleasure that the generous and enlightened action of the School Board in anticipating and supplying the wants of these schools has been met by a full appreciation and use of the aids afforded. We have passed the day of experiment, and on a broad and firm foundation are building up our evening school system.

Unquestionably, the thorough knowledge of a few branches of study is better than a smattering of many. This is our basis, and we are continually able to approximate more nearly to the statute requirement of all the studies ordinarily taught in the grammar schools.

The schools have been held in the same places as last year, and we realize more and more the good results of placing them in the rooms occupied by the day schools. The complaint of loss of articles from the desks has almost entirely ceased, and the fidelity of teachers and janitors leaves no other room for complaint.

The Fall term commenced Oct. 4th, making the first term to December 24th, twelve weeks. The Christmas vacation will be two weeks as in the day schools, to be followed by a term of ten or eleven weeks. Our experience has shown that four evenings in a week have produced the best results in the schools, and the plan is continued this year. The schools commenced in October with an attendance of one hundred and ninety scholars and gradually rose in three weeks to an attendance of three hundred and sixty-four. This was the largest attendance any single evening, the smallest number (during a severe snow storm) being one hundred and thirty. As Christmas approaches the attendance falls off owing to natural causes, among which we may mention extra work in factories where some of the scholars are employed, work of their own for Christmas gifts, and severe storms.

We have been fortunate in securing the services of most of the teachers of last year, who thereby add to their former good service the value of experience in this peculiar branch of education.

Two of the assistants were promoted to positions in the day schools, and the increase in attendance has called for eight additional assistants in their places. The key to success in evening, as in day schools, lies not only in the ability of the teacher but in enthusiasm for the special work. Since no truant officer can enforce a regular attendance of these scholars, they must be held (if at all) by the personal magnetism of the teachers.

Again, so much individual attention must be given to each scholar and at the same time the whole class kept in view, that exhaustion of mind and body often follows the evening's work. The teacher's position is no sinecure. We have endeavored to recognize this by dealing liberally with them in the matter of salaries.

The studies taught in the evening schools are reading, spelling, writing, arithmetic, geography, history and language. The difficulty of finding a proper text book for the study of physiology and hygiene, with special reference to the effects of stimulants and narcotics, having been overcome, that study will soon be added to our list.

As the commercial and manufacturing interests of our city draw within its limits a large foreign population, and as many of them are past the age that entitles them to instruction in the day schools, or could not attend on account of their occupations, it is gratifying to see them gather in the evening schools where they are better fitted to conduct their own business, as well as for the intelligent duties of American citizenship. The percentage of birth and parentage of those now in the evening schools is about as follows:

English and Scotch,		33 pe	er cent.
Irish,		20	4.6
French and Canadian,		17	66
Portuguese,		14	6.6
American, (black and white,)		10	66
German		6	4.4

The total number of pupils enrolled in the evening schools this season is a little over five hundred, of whom about three hundred and fifty are males and one hundred and fifty females. The average membership has been about three hundred and eighty, and the average attendance two hundred and seventy. We have employed twenty-one teachers, giving an average of thirteen scholars to each teacher. The largest school is the most economical in this respect, the central school averaging thirty-two scholars, or eleven scholars to one teacher; the south school ninety-two scholars, or thirteen to one teacher; the north school one hundred and fifty scholars, or fourteen to

a teacher. This, of course, includes the stormy with the pleasant nights, some of the latter averaging over twenty scholars to a teacher. The oldest scholar in these schools is about seventy years of age, and the youngest is not quite fourteen; a very large proportion, however, a majority of them are between the ages of twenty and thirty. While the most of them have no special object in view, a few are fitting for a definite civil service examination.

We are confident that these schools are an important part of the educational system; that they are fast finding and occupying their proper place in it; and that great results for good to the individual and to the community will flow from them.

For the Committee.

JAMES C. BRIGGS, Chairman:

DRAWING.

This department of our schools has maintained the same high standard of efficiency which has characterized it in former years. It is a matter of sincere congratulation for both our School Board and our citizens that we have been able to retain the services of both our drawing master and his valuable assistants in the evening school. No expenditure for instruction is wiser, more timely or practical than this. None repays the outlay sooner. As illustrating this fact, I need only mention the large number of our pupils who are successfully pursuing this vocation in the decorative department of a number of our manufactories. As showing the quality of the instruction given by Mr. Cumming, I refer with pleasure to the statement made by Mr. Kastner at the head of the Lowell School of Design of Boston that no pupils attending his school come so well prepared as those from our city, whom, in a vein of pleasantry, he calls his heavy artillery. The graduates of our High school are given a preference in admission to the Lowell school, an important fact when it is remembered that the number of pupils is limited to sixty-three, and that seventy-five applicants were rejected, while only ten were admitted the past year. Eight of the graduates of our High school are now in attendance at the Lowell School of Design; a much larger number than from any other city in the state except Boston, which contributes only a few more. What better commentary on our work than this?

I take pleasure in embodying in this Report for the benefit of our citizens who may be ignorant of the extent of our work, the following facts given by our drawing master. First, as taught in our grammar schools. The Parker street school takes drawing from the Eighth grade, with work in original designing the latter part of each year. The Middle street school takes object drawing from the Ninth grade with original designing as above, while at the Fifth street school the same work is commenced with the Seventh grade and continued as in the other schools. The boys' work at the High school is carried on in a very practical manner. They take their own measurements from different pieces of furniture, doors and windows; and make measured drawings to a scale, so that a mechanic could work from the several drawings, and also detail work.

As showing the advantage of beginning object teaching according to the French methods of instruction, Mr. Cumming states that we have better work, in comparison, in the grammar schools than we have in the High school; and I would recommend simple object drawing in the primary schools from the beginning. The Committee owe Mr. Cumming an expression of thanks for his voluntary services cheerfully given the teachers of the lower classes in the grammar schools, in teaching them object drawing

and perspective on Mondays, after school hours, in order to interest them more in their work, and he authorizes me to state that he is willing to give instruction to the primary teachers as well, free of charge, at any time the Board may appoint.

EVENING DRAWING SCHOOL.

The same able corps of teachers have continued to serve in this school as in former years. The attendance and interest in the work are both gratifying and commendable.

The average of attendance for the year has been as follows: In mechanical drawing twenty-six, in free hand thirteen men and six women. In accordance with suggestions of the Committee, applicants for instruction in mechanical drawing without the slightest knowledge of the elementary principles of geometry have been relegated to a back seat, and so have been prevented from impeding the progress of their more advanced associates. While we welcome all earnest workers, the time of our teachers is too valuable to be wasted in primary instruction in geometry.

CHAS. T. BONNEY, Chairman.

SEWING.

There has been no deviation during the past year from the regular line of improvement, which, from its start, the sewing department has followed.

So little machinery is needed for its workings, and so quietly do the three teachers who have it in charge carry out its requirements, that but for the annual exhibition, we should scarcely be conscious that such a course of instruction was being given in the school curriculum.

About 1500 girls, having individual attention from the

teachers during forty hours a year in the school room, have brought to a state of completion some 4000 articles.

They have been trained meanwhile in habits of care and self-reliance in a direction which it would have been impossible for any of them to receive at home, even under the most favorable circumstances. The knowledge and skill thus attained will not only enable them to perform good work themselves, but will make them better judges of the labors of those whom they may have to employ hereafter.

We have every reason to congratulate ourselves in having secured teachers who enter so heartily into the work, and who so faithfully execute the plans of your Committee.

Respectfully submitted.

B. B. WINSLOW, Chairman.

MUSIC.

This interesting and important branch of school work as taught in our schools at present, maintains the advanced position accorded it by all lovers of the beautiful, and by those who are more particularly interested in the development of the admirable system as taught by Mr. Diman. Nothing has been left undone that would enhance the interests of the work that the Committee through their limited authority have the power to bestow, and the results of the year's work disclose marked improvement in general, and a very satisfactory condition of things in the success attained.

The suggestion made in my last annual Report, that all persons applying for positions as teachers in the public schools of the city be required to pass a satisfactory examination in the rudimentary work of vocal music, has been adopted by the Board, and the hope is entertained

that results will accrue that will create a deeper interest in this attractive as well as useful study by those who may hereafter contemplate teaching in our schools.

The Committee learn with much satisfaction that in the recent examination of candidates for teaching, the music department was represented by a series of questions, which, upon being answered, revealed the fact that nearly all the applicants possessed sufficient acquaintance with the work to qualify them for positions as teachers, other things being equal. Quite a large proportion of these candidates answered the prescribed questions correctly, while others were deficient in one or two minor points; and there were none but had some knowledge of the science. This to the Committee is encouraging, as it furnishes evidence of the thoroughness which characterizes the instruction imparted by the music teacher, as nearly all of the applicants were graduates of the High school.

Mr. Diman has labored assiduously throughout the year, and the enthusiasm with which he not only enters upon his work, but which is constantly maintained, and the success which attends his efforts, are alike noticeable to every observing mind, and reflect great credit upon him and upon the scholars whom he instructs. He has been seconded very generally by the regular teachers who have willingly co-operated with him, and the results reached are, to a greater or less extent, attributable to their efforts, all of which are appreciated by the Committee and meet with their unqualified approval.

Concerning the recommendation made in my last annual Report that means be devised or some plan adopted to relieve Mr. Diman of a portion of his work as then engaged in, in order to enable him to devote more time to those schools which have been more or less omitted, and which need his services most, I have to say that nothing decisive has been arrived at as yet. The matter has been in the hands of the proper Committee and several suggestions have been proposed, none of which have fully met with the approval of this Committee. The matter at present is in the hands of the Committee on Teachers, who are prepared to offer a plan for trial, which it is hoped will meet with the approbation of the Board.

Notwithstanding that all the time allotted the music teacher in all the grades is faithfully occupied, and very excellent work is the result, there are portions of the work which are necessarily omitted because of the lack of sufficient time to attend to it; and to obviate this difficulty, to a certain extent at least, it is hoped that the plan to be recommended will be adopted at once, and the music teacher be allowed to give the mill schools and the three lower grades in the primary schools the benefits of his personal instruction; for we believe that the study of music should commence as soon as a child enters school.

For the Committee.

S. H. SHEPHERD, Chairman.

REPORT OF THE COMMITTEE ON THE SYLVIA ANN HOWLAND EDUCATIONAL FUND.

The balance on hand January 1st, 1886, was Interest for the year 1886,	\$1,180.41 3,000.00
Amount returned,	3.30
Making a total credit for 1886 of	\$4,183.71
The expenditures for the current year amount to	3,383.82
Leaving a balance on hand, January 1st, 1887, of	\$799.89

The number of books furnished to the several schools for supplementary reading and for reference, with the aggregate cost of the same, is as follows:

	No. copies.	Cost.
Acushnet avenue school,	96	\$22.81
Arnold street "	47	9.59
Acushnet	16	5.57

Cedar Grove str	eet school.	45	\$13.12
Cannonville	44	49	11.94
Cedar street	44	1	.67
Clark's Point	44	31	19.16
Dartmouth stree	et "	1	.67
Fifth street	44	254	136.14
Fourth street	44	126	31.34
Grove	44	91	24.27
High	44	320	325.85
Kempton street	44	91	30.67
Linden street	44	61	19.41
Middle street	¢ 4	87	57.47
Maxfield street	66	91	31.56
Merrimae street	66	54	11.00
Mill, north	44	40	14.05
Mill, south	66	27	11.54
North	44	68	25.52
Parker street	44	164	94.56
Rockdale *	44	57	38.24
Thompson stree	t "	159	91.82
William street	46	52	9.35
	Total for the year,	2,028	\$1,036.32

At the beginning of the current year (1886), a rule was adopted by your Committee, requesting the sub-committees having supervision of the several schools to examine the applications of their respective teachers asking for appropriations from the income of the Howland fund. The object which we had in view in adopting this rule was that the requests might be carefully scrutinized by the Committees, and if in their opinion any objectionable features existed they might be eliminated before presenting them for consideration and approval by the Howland Fund Committee. This action we think has proved efficacious to an unexpected degree. It has, as it were, put the sub-committees on their good behavior, making them cautious in action, and careful of their conclusions, as they too must bear a part of the responsibility, and share a portion of the odium resulting from ill-advised recommendations. Thus year by year additional rules are adopted looking to the perfecting

of methods whereby the income of the fund can be systematically and wisely expended. But a uniform method of procedure is difficult to arrange, owing to the varied views of the teachers making applications.

Some of the requests seem to be based upon both the homeopathic and allopathic theories—homeopathic as to their frequency, and allopathic as to their magnitude. Requests of this nature tend to bias the minds of the Committee to unfavorable conclusions. Teachers should curb their whims as to their wants and needs when asking for supplies, keeping in mind, too, that monthly demands are not imperative, and that fines are not imposed should lapses occur.

For the Committee.

J. HOWLAND, JR., Chairman.

TEXT BOOKS.

The amount appropriated for the purchase of books and supplies for the past year was \$4,000. The amount expended was \$3,510.09. It is impossible to estimate exactly as yet how much will be needed for the purchase of books during the coming year, as some of the pupils own the books they use, and not until two years from now will all pupils have the full benefit of being supplied with books at the public expense.

Parents, with few exceptions, seem to approve the use of city property by their children. In the grammar schools, where it may be said that all the children attend for a longer or shorter period, not more than nineteen pupils own the books they use. Of these twelve attend the Middle street, four the Parker street, and three the Fifth street school.

The Committee have recommended during the year such

new text books as have seemed to be needed, and their recommendations have met the approval of the Board. Such supplies also have been furnished, both in quality and quantity, as the Committee have thought to be needed, while having in mind an economical though not niggardly expenditure of money.

The addition of text books for use in the High school is as follows:

Shepard's Inorganic Chemistry.
Hutchinson's Physiology and Hygiene.
Packard's First Lessons in Zoology.
Collar & Daniells' First Lessons in Latin.
Autenreith's Homeric Dictionary.
Hennequin's Idiomatic French.
Roulier's First Book of French Composition.

Jones' First Lessons in Latin has been exchanged for Collar & Daniells' First Lessons in Latin.

The only book which the Board has voted to put into the schools other than the High school is "The Child's Health Primer." This is to more fully comply with the law requiring the teaching of the influence of alcohol and narcotics on the human system.

The following is a complete list of the text books used in the schools:

PRIMARY SCHOOLS.

Franklin First Reader.
Franklin Advanced First Reader.
Franklin Second Reader.
Franklin Advanced Second Reader.
Franklin Third Reader.
Franklin Advanced Third Reader.
Harrington's Spelling Book, Part I.

GRAMMAR SCHOOLS.

Franklin Advanced Third Reader. Franklin Fourth Reader. Franklin Advanced Fourth Reader. Franklin Fifth Reader.
Franklin Sixth Reader.
Bradbury's Eaton's Arithmetic.
Seaver & Walton's Mental Arithmetic.
Warren's Common School Geography.
Harper's Introductory Geography.
Scott's (smaller) History of the United States.
Berard's History of the United States.
Barnes's History of the United States.
Swinton's Language Lessons.
Greene's Introduction to English Grammar.
Harrington's Spelling Book, Parts I, II.

HIGH SCHOOL.

The Young Chemist, John H. Appleton. Inorganic Chemistry, Shepard. Physiology and Hygiene, Dalton. Physiology and Hygiene, Hutchinson. Geological Story Briefly Told, Dana. Astronomy for High School, Gillett & Rolfe. First Lessons in Zoology, Packard. Natural Philosophy, Avery. Physical Geography, Guyot. Arithmetic, Part II, Fish. Elementary Algebra, Wentworth. Geometry, Wentworth. Plane Trigonometry, Wentworth. Book-keeping, Meservey. Elements of Rhetoric and Composition, D. J. Hill. Exercises in English Composition, Parker. British Authors, Underwood. American Authors, Underwood. Civil Government, Martin. History of Ancient Peoples, Barnes. Outlines of the World's History, Swinton. Sixth Reader, Monroe. First Lessons in Latin, Collar & Daniells. First Lessons in Latin, Jones. Latin Composition, Jones. Latin Grammar, Harkness. Cicero, Harkness. Cæsar, Greenough. Virgil, Greenough. First Lessons in Greek, White.

Greek Grammar, Goodwin. Greek Prose Composition, Jones. Xenophon and Herodotus, Goodwin. Homer's Iliad, Boise. Greek Lexicon, Crosby. Homeric Dictionary, Autenreith. French Grammar, Keetel. French Reader, Keetel. Causeries Avec mes Eleves, Sauveur. Petites Causeries, Sauveur. Idiomatic French, Hennequin. First Book of French Composition, Roulier. French Dictionary, Spiers & Surenne. German Rudiments, Ahn Henn. German Grammar, Wenckebach. Der Neue Leitfaden, Heness. Haus Marchen, Grimm. Hermann and Dorothea, Goethe. Deutsche Grammatick, Wenckebach.

This list by no means includes all the books deemed essential to give the children of our city a liberal education. The Howland Fund Committee furnishes from time to time such books as are considered useful for supplementary work, and the number of these already in use has reached a no small proportion. We have reason to believe that many of this class of books are used as text books, and in this way some which the Board would not adopt as text books are made such by the teachers.

The cost of books and supplies for the several schools in detail is as follows:

	Books.	1886. Supplies.	Total.
High school,	\$407.64	\$378.63	\$786.27
Fifth street grammar school,	160.15	263.84	423.99
Middle "	207.19	298.07	505.26
Parker "	45.30	253.15	298.45
Thompson " "	172.12	103.28	275.40
Acushnet avenue primary school,	7.07	50.18	57.25
Arnold street primary school,		2.21	2.21
Cedar street primary school,	1.50	29.03	30.53
Cedar Grove street primary school	, 8.00	29.63	37.63
Dartmouth street primary school,		44.15	44.16

	1886.		
	Books.	Supplies.	. Total.
Fourth street primary school,	\$4.17	\$19.06	\$23.23
Grove primary school,		20.42	20.42
Kempton street primary school,	5.46	20.62	26.08
Linden street primary school,	2.82	10.37	13.19
Merrimac street primary school,		22.54	22.54
Maxfield street primary school,		28.96	28.96
William street primary school,	6.74	22.22	28.96
North Mill school,		10.12	10.12
South Mill school,	3.75	5.24	8.99
Acushnet school,	23.52	22.31	45.83
Cannonville school,	13.30	4.56	17.86
Clark's Point school,	14.69	13.02	27.71
North school,	10.45	12.73	23.18
Plainville school,	12.74	7.62	20.36
Rockdale school,	.75	7.25	8.00
Central evening school,			19.01
North evening school,			132.82
South evening school,			41.44
Evening drawing school,			98.26
,	\$1,107.36	\$1,970.74	\$3,078.10

It is but just to say that some of the difficulties which it was feared would attend the free supply of books have not been realized. They are well cared for by the pupils generally, and the teachers express the opinion that they are preserved in better condition than they would be were they owned by the children. The teachers themselves keep a watchful care of the books, to make sure that they are properly handled and receive no injury.

I feel it my duty to say that in rendering their accounts at the end of the several terms some of the principals have been very incorrect. It is perplexing and occupies a deal of time to keep a record of books and supplies, but when so much money is expended as must necessarily be the case in this direction, the Committee cannot do less than require a correct accounting of the purchases placed in the care of the teachers.

For the Committee.

WILLIAM H. PITMAN, Chairman.

DETAILED STATEMENT

OF THE OUTLAY BY THE SCHOOL COMMITTEE FROM THE HOWLAND INCOME FUND, FROM JANUARY 1, 1886, TO JANUARY 1, 1887.

BOOKS AND PERIODICALS.

\$22.00	
8.50	
69.17	
19.00	
31.03	
24.30	
11.00	
14.00	
15.00	
72.00	
21.67	
207.40	
61.12	
20.60	
11.40	
12.00	
9.75	
2.40	
46.67	
20.00	
39.00	
16.80	
32.92	\$787.73
	8.50 69.17 19.00 31.03 24.30 11.00 14.00 15.00 72.00 21.67 207.40 61.12 20.60 11.40 12.00 9.75 2.40 46.67 20.00 39.00 16.80

DRAWING DEPARTMENT.

Harrington, H. F., expenses,	\$2.10	
Lawton, James M., Jr., drawing books,	2.00	
Prang Educational Co., drawing models,	327.26	331.36

MUSIC DEPARTMENT.

Boden, E., Jr., organs	and piano covers,	\$220.00
Diman, F. L., sheet m	usic,	13.86
Ditson, Oliver & Co., singing books,		22.50
Ginn & Co.,	66 66	62.67
Hume, Harrison,	**	108.50

CITY DOCUMENT No	. 6. J	anuary,
keman, Taylor & Co., singing books,	\$52.50	
F., organs and stools,	195.00	
rge, care of pianos and organs,	262.00	
& Co., singing books,	91.67	\$1,028.70
APPARATUS.		
as. F., camera slides,	\$31.45	
Vincent, set of scales,	3.00	
Amend, chemical apparatus,	235.20	
T. H., camera slides,	19.50	
R. & Son, apparatus,	15.50	
ingman & Co., "	6.00	
lk. A.,	2.00	
••	8.20	320.85
BINDING.		
& Bro.,	\$34.95	34.95
SEWING DEPARTMENT.		
. & Son, advertising,	\$2.17	
G. F. W., estate of—carting,	3.00	
, S., paper,	.50	
blishing Co., advertising,	3.00	
., messenger service,	11.50	
.,	2.00	
Caroline H., sewing material,	3.00	
B. & Co., cotton, needles, etc.,	6.48	31.65
PRIMARY DEPARTMENT.		
. & Sons, reward cards,	\$9.00	
on Acco object cumulies	1.50	

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Ivison, Blak McCabe, B. Peirce, Geor Ware, Wm.

Adams, Cha DeWolf & V Eimer and A McAllister, Sherman, C Sullings, Ki Sowle, Fred Tripp, S. A.

Kane, D. J.

Anthony, E Gammons, C Hutchinson, Mercury Pu Paine, N. L. Piper, A. D. Richmond, C Whiting, E.

Anthony, E. Central Union Asso., object supplies, 4.50 4.6 Harrington, H. F., 3.00 Lawton, J. M., Jr., elastic bands and picture books, 4.46 Mercury Pub. Co., primer blanks and reward cards. 124.25Milton Bradley & Co., object supplies, 12.60Prang Educational Co., " 62.50Perry, George S., envelopes and chart holder. 4.75 Paine, S. S. & Bro., clay for modelling, 1.00 226.06

MISCELLANEOUS.

Almy, Emma M., cash paid for covering books,	\$71.53	
Almy & Hitch, fitting and hanging maps,	21.68	
Cushman Bros. & Co., map balances, etc.,	41.73	
Corson, T. S., freight and carting,	.40	
Eimer & Amend, chemicals,	79.01	
Eldridge, John, Jr., express,	3.67	
Frost, George & Co., file for pencil sharpener,	.21	
Gray, Charles A., freight and carting,	4.00	
Hatch & Co., express,	13.20	
Hutchinson, S., covering paper, glue, etc.,	12.75	
Hazzard, James B. & Son, staining map cornice,	2.50	
Hutchinson, H. S. & Co., paper,	.38	
Look, John W., map cornices,	46.88	
Old Colony Railroad Co., freight,	1.02	
Perry, George S., maps, globes and covering paper,	297.30	
Sherman, C. R. & Son, hooks and handles for maps,	5.90	
Spare, J. V., cotton cloth,	1.80	
Sherman, Ruth S., covering books,	1.60	
Tripp, George H., collection Rocky Mt. minerals,	15.00	\$620.56

\$3,381.86

Note.—Since my Report on the High school went through the press, Mr. Mathews, the member of the Committee having special charge of the High school house, has applied a remedy for the escape of noxious gases from the chemical laboratory into the body of the house which I trust will prove successful.

J. E., Jr.

IN SCHOOL COMMITTEE,

December 31, 1886.

January,

On motion of Mr. Eldridge:

Voted unanimously, That the thanks of the Board are due and are tendered to His Honor, the Mayor, for the courteous, impartial and able manner in which he has presided over its deliberations during the year; and that while congratulating him on his re-election, we look forward with much pleasure to his continuance in the chair for another year.

On motion of Mr. Tompkins:

Voted unanimously, That the thanks of the Board are tendered to the Vice Chairman for the able and impartial manner in which he has presided over the deliberations of the Board during the absence of his Honor, the Mayor.

On motion of Mr. Washburn:

Voted unanimously, That the thanks of the Board are presented to the Secretary for his faithful and acceptable service.

GRADUATING CLASS OF THE HIGH SCHOOL.

William Hastings Bassett. Ralph Vincent Blake. James Francis Carlin. John Manchester Case. James Nicholas Conway. Walter Williams Cunliffe. Lester Everett James. Walter Frank Jav. Joseph Stockbridge Lewis, Jr. James Franklin Macy. Philip Edwin Macy. Edward Peirce. Albert Russell Pierce. Frederic Warren Smith. George Lincoln Smith. George Howard Spooner. Alice Maud Abrams. Mary Alice Akin. Harriet Almy. Lucy Delana Ashley. Sarah Briggs Barrows. Charlotte Hicks Bearse. Essie Louisa Boden. Annie Louise Brownell. Alice Berrick Chace.

Mary Lizzie Cogan. Marian Delia Cudworth. Eleanor Richardson Dexter. Myrtilla Matthes Dwight. Carrie Kempton Gifford. Betsey Belle Holcomb. Mary Josephine Irving. Annie May King. Anna Peirce Lyons. Theresa Howland Macomber. Mary Cornell Macomber. Florence Brock Maey. Minnie Josephine Page. Emily Hill Pierce. Abbie May Potter. Carrie Nichols Deborah Potter. Mary Frances Reed. Alfreida Kimball Richards. Clarabell Ruland. Annie Florence Smith. Elizabeth Smith. Flora Abbe Swift. Katherine Maria Tripp. Elmira Markoff Watson. Sarah Ashlev Winslow.

Susan Pease Wood.

SCHOOL COMMITTEE __ 1886.

MORGAN ROTCH, Chairman, ex officio.

EDMUND WOOD, President of the Common Council, ex officio.

WARD 1-Mrs. Stanton, G. W. Hillman, L. Z. Normandin.

WARD 2-Tompkins, Braley, Shepherd.

WARD 3-Mrs. Webster, Pitman, Benjamin.

WARD 4-Mathews, Eldridge, Dunbar.

WARD 5-Howland, Washburn, Bonney.

WARD 6-Miss Winslow, Briggs, Parker.

STANDING COMMITTEES.

ON HIGH SCHOOL.—Eldridge, Washburn, Bonney, Howland, Braley, Benjamin, Dunbar, Miss Winslow.

ON GRAMMAR SCHOOLS.—Washburn, Miss Winslow, Pitman, Braley, Dunbar, Briggs, Mrs. Webster.

ON PRIMARY SCHOOLS.—Benjamin, Miss Winslow, Pitman, Shepherd, Parker, Tompkins, Mrs. Stanton.

ON COUNTRY SCHOOLS.—Parker, Hillman, Normandin, Briggs, Mrs. Stanton, Mrs. Webster.

ON FARM SCHOOL.—Braley, Parker, Bonney, Washburn, Hillman, Normandin, Mrs. Webster.

ON MILL SCHOOLS.—Tompkins, Howland, Normandin, Shepherd, Hillman, Mrs. Webster.

ON EVENING SCHOOLS.—Briggs, Howland, Pitman, Normandin, Hillman, Bonney, Mrs. Stanton.

ON EXAMINATION OF TEACHERS.—Eldridge, Washburn, Benjamin, Braley, Parker, Shepherd, Bonney, Briggs, Miss Winslow, Tompkins.

ON TEXT BOOKS.—Pitman, Dunbar, Washburn, Mathews, Hillman, Briggs, Mrs. Stanton, Wood.

ON MUSIC.—Shepherd, Mathews, Pitman.

ON DRAWING.—Bonney, Eldridge, Miss Winslow, Parker, Normandin, Mrs. Webster, Wood.

ON EXPENDITURES.—Mathews, Benjamin, Dunbar, Howland, Pitman, Braley, Tompkins, Wood.

ON HOWLAND FUND.—Howland, Benjamin, Mathews, Bonney, Eldridge, Dunbar, Tompkins, Wood.

ON SEWING.—Miss Winslow, Washburn, Benjamin, Shepherd, Mrs. Stanton, Mrs. Webster.

ON PAY ROLLS .- Dunbar, Mathews, Tompkins.

SCHOOL COMMITTEE—1887.

MORGAN ROTCH, Chairman, ex officio.

WILLIAM A. CHURCH, President of Common Council, ex officio.

H. F. HARRINGTON, Secretary and Superintendent Public Schools.
Office, 7 Pleasant street.

Office hours, $8\frac{1}{2}$ to 9 A. M., $12\frac{1}{2}$ to 1 P. M. Saturdays, $9\frac{1}{2}$ to 10 A. M.

WARD 1-Annie R. Borden, Elizabeth W. Stanton, G. W. Hillman.

WARD 2-S. H. Shepherd, I. B. Tompkins, Jr., E. P. Haskins.

WARD 3-I. W. Benjamin, Helen W. Webster, W. H. Pitman.

WARD 4-G. H. Dunbar, W. H. Mathews, J. Eldridge, Jr.

WARD 5-C. T. Bonney, J. Howland, Jr., F. A. Washburn.

WARD 6-F. H. Gifford, Betsey B. Winslow, J. C. Briggs.

STANDING COMMITTEES.

ON HIGH SCHOOL.—Eldridge, Washburn, Bonney, Howland, Dunbar, Benjamin, Mathews, Miss Winslow.

ON GRAMMAR SCHOOLS.—Washburn, Miss Winslow, Pitman, Dunbar, Briggs, Mrs. Webster, Haskins.

ON PRIMARY Schools.—Benjamin, Miss Winslow, Pitman, Shepherd, Tompkins, Mrs. Stanton, Mrs. Borden.

ON COUNTRY SCHOOLS.—Mrs. Stanton, Hillman, Briggs, Mrs. Webster, Gifford, Haskins.

ON FARM SCHOOL.—Haskins, Bonney, Washburn, Hillman, Gifford.

ON MILL SCHOOLS.—Tompkins, Howland, Shepherd, Hillman, Mrs. Webster, Mrs. Borden.

ON EVENING SCHOOLS.—Briggs, Howland, Pitman, Hillman, Bonney, Mrs. Stanton, Mrs. Borden.

ON MUSIC.—Shepherd, Mathews, Pitman.

ON DRAWING.—Mrs. Webster, Eldridge, Miss Winslow, Bonney, Giford, Haskins, Church.

ON SEWING.—Miss Winslow, Washburn, Benjamin, Shepherd, Mrs. Stanton, Mrs. Webster.

ON EXAMINATION OF TEACHERS.—Eldridge, Dunbar, Washburn, Benjamin, Shepherd, Briggs, Miss Winslow, Tompkins, Mrs. Stanton.

ON TEXT BOOKS.—Pitman, Dunbar, Washburn, Mathews, Hillman, Briggs, Mrs. Borden.

ON EXPENDITURES.—Mathews, Benjamin, Dunbar, Howland, Pitman, Tompkins, Eldridge, Gifford, Church.

ON HOWLAND FUND.—Howland, Benjamin, Mathews, Bonney, Eldridge, Tompkins, Church.

ON PAY ROLLS.—Dunbar, Mathews, Tompkins.

N. L. Paine, Truant Officer, will hold office hours in the Superintendent's room from 8 to 9½ o'clock, A. M., and from 12 to 1 o'clock, P. M., on the five school days.

ANNUAL REPORT

OF THE

SUPERINTENDENT OF SCHOOLS

FOR THE YEAR 1886.



SUPERINTENDENT'S REPORT.

To the School Committee:

Ladies and Gentlemen: Warned by the protracted illness from which I have only lately recovered not to subject my returning strength to any unusual strain, I shall limit my Report to a review of some points in the legislation of the Board and of the sub-committees during the closing year.

THE NEW MANUAL.

The points I refer to are of special importance in connection with the manual on which I am engaged. In my Report for 1884 I took occasion to say that there is veritably a "Science of Teaching" and that I should feel humiliated to prepare a manual for our schools now that the existence of a philosophical basis for the teacher's work has been thoroughly demonstrated, if I did not make effort to ground it on that basis. I stated, also, that I have delayed the completion of the manual because of a wish to arrive at settled convictions respecting some essential points in school management which have hitherto been undetermined. The advance which has been made during the past year, through the legislation of the Board, in removing these hindrances, is as helpful as it is gratifying; and the best feature of it is the fact, clearly evolved in the preliminary discussions and the unanimity of the final action, that the several decisions were solidly grounded on principle and will be firmly adhered to.

In this connection I take occasion to make a passing allusion to the distinctive character of the legislation of the Board during the many years that I have had charge of the New Bedford schools; for it is because of the favoring results of that legislation that I am able to actualize my resolve to ground the instructions of the manual on scientific principles. It is all the more deserving of remark because, as compared with that of the great majority of the School Boards of the country, it is exceptional. Our schools maintain a high rank. Some of the most distinguishing features of elementary school work at the present time found their first development in the New Bedford schools. Studies and methods of essential value, also, received from the past, have been tested in our schools as to the measure of their fidelity to scientific principles, and many a defective method amended, many an excrescence lopped away. Furthermore, experiments have been boldly tried with new candidates for places in the school curriculum, to be as boldly discarded as soon as their pretensions were found to be false. Action in all these particulars has been tentative and consistent, always holding in view the attainment of a perfect system; and thus, in a discriminating, progressive way, our school work has been revised and reinforced until the right basis for the most profitable kind and quality of instruction seems to have been fully developed and enjoined; and nothing is left but for the teachers—animated by an intelligent application of the principles by which they should govern their efforts—to perform their work with system, enthusiasm and fidelity, giving to every portion of the prescribed course of study the attention which is its due.

As I have said, I shall comment on those points only which have been affected by the year's legislation; and I begin with the

REQUISITES FOR THE EXAMINATION OF CANDIDATES TO BE TEACHERS.

I have sympathized heartily with those members of the Board who have been earnest for the prescription of a more thorough test of scholarship in relation to candidates for positions as teachers in our schools, than the superficial examinations with which we have so long been content. In my last annual Report I treated of this subject at length, asserting my belief that this was the weakest point in our whole school system. I endeavored to set forth effectively that the corner-stone of a good school system is the employment of none except first class teachers; and that those school authorities alone are squarely abreast of this principle, who, utterly regardless of side issues of every kind, seek for and obtain thoroughly capable and thoroughly experienced teachers wherever they may be found, and give positions to none beside. And I did not hesitate to add that the comparatively meagre amount of knowledge requisite to pass successfully one of our teachers' examinations and thereby to secure a place in our teaching force, was an open satire on our pretensions to possess the best of schools.

I recommended the adoption of the method of certificating teachers which prevails wherever the subject has secured the attention it merits—which is, to establish three grades of certificates, adapted, respectively, to service in our three principal school departments, and to be acquired, severally, by success in an examination having a similar adaptation in its requirements to the grade which the applicant seeks to secure.

My recommendation was referred to the Committee on Teachers for their consideration. After thoughtful attention on their part it was unanimously adopted, and a subcommittee appointed to draft the requirements for the examination of candidates to be teachers on the basis of three grades of certificates.

This was a serious duty. It was of the last importance that the system, if adopted, should stand and be adhered to. It must commend itself, therefore, by its reasonableness and its practicality. Its requirements must not be overstrained. They must have relation not only to the abstract question of what is essential to a teacher's fitness, but also to the conditions in reference to recruits for our corps of teachers which in a measure hold us in subjection. The demand must be answered for a great advance on the existing requirements, yet stop fairly short of demanding too much. The problem presented precisely one of the many instances in connection with school affairs in which theories which are abstractly sound and practical are so at variance with controlling circumstances that they can be put to service only after essential modifications. That a teacher should be a thorough and comprehensive scholar is a sterling theory, but public school authorities are compelled to lower its sublime standard many points.

The draft of qualifications for candidates to be teachers, after various amendments by the Committee on Teachers, was submitted to the Board and adopted as follows:

QUALIFICATIONS FOR CANDIDATES TO BE TEACHERS.

Section 1. To qualify candidates to hold positions as teachers in the schools of New Bedford, there shall be three grades of certificates, severally corresponding in their requisitions to the class of studies pursued in the department of schools to which they shall specifically

refer. They shall be termed first grade, second grade

and third grade certificates.

A third grade certificate shall qualify a candidate to be an assistant in a primary school; a second grade certificate shall qualify a candidate to teach as principal of a primary school, or assistant in a grammar school, or principal or assistant in a country school or a mill school; a first grade certificate shall qualify to teach as principal of a grammar school, or in the High school. A higher certificate shall include a lower:

SEC. 2. No instructor shall be employed in any higher grade of schools than that for which the certificate shall qualify the holder thereof.

All teachers in actual service and candidates on the approved list, are hereby exempted from the provisions of

this section during the school year 1886-87.

SEC. 3. Each candidate must bring to the examination, (I) a certificate of graduation from a high school, or normal school, or what shall be considered by the Examining Committee an equivalent therefor; (2) a certificate of good moral character; (3) testimonials of success in teaching, if there has been any practical experience.

All teachers in actual service and candidates on the approved list are hereby exempted from the provisions of

this section.

SEC. 4. The subjects of examination for the several grades of certificates shall be as follows:

THIRD GRADE.

Language—The English language, its grammar and literature; the power of easy and accurate composition, showing the possession of an available vocabulary and a trained ability to think and reason; the power to read with intelligence and expressive elocution.

Writing—A creditable hand writing.

Mathematics—Arithmetic; the elements of plane geom-

etry.

Geography and history — Physical and political geography; general history, or the history of England and of the United States.

Sciences—Physiology with school hygiene; the elements of physics; the elements of any one of these sciences: botany, zoology, geology.

Subjects of general fitness—The characteristics of the human mind, and the right methods for their develop-

ment; the principles of teaching.

Music and drawing—The rudiments of music and drawing.

SECOND GRADE.

The various subjects required for examination for a third grade certificate, each carried forward to a more extensive familiarity with principles and facts, and the following addition:

Civil government, with special reference to the United

States.

FIRST GRADE.

The various subjects required for a second grade certificate, enlarged to still more comprehensive limits, and the following additions:

History and structure of the English language.

Algebra.

Latin; and French or German.

There is a class of persons who will pronounce this programme of requirements to be in some respects essentially defective. They will say, for instance, that the provisions for an adequate knowledge of English for a third grade certificate fall far short of the tests which should be provided for any and all teachers; for every teacher should be proficient not only in a knowledge of so much of the scientific structure of the language as is embraced in the technical term, Syntax, or Grammar, but also in that of its historical development, and its comparison with its related group of dialects. Says a teacher,

whose school is expressly intended to prepare young persons to be teachers, "In the last fifty years there has been a great change in the scientific world, and the word 'comparison' may be called the key word of modern science. When a law looks dark we throw upon it the light of some kindred law. So we have comparative philology and comparative theology. This great movement is felt in the public schools. In geology, chemistry, botany, etc., in a school of any pretensions, the teacher is required to have a good knowledge of the subject in the line of comparative study. Peculiarly rapid progress has been made in philology. The way to study a language is to study its historical development and its comparison with its related group of dialects. No one needs more to know the history, the structure, the genius of a language than the teacher of small children," and in fealty to this conviction, he makes Anglo-Saxon an initial study of his English course.

I may be at fault, but I feel compelled to dissent from this position, as applied to the preparation of candidates to be teachers for their work, on two grounds:—One, that the reasoning which professes to justify it is incorrect in both its premises and conclusions; a second, that it ignores the conditions which compel school authorities to accept a less exhaustive knowledge of the subjects to be taught. For the sake of convenience I shall discuss the latter objection first.

I object to this teacher's position, then, because it ignores the constraints which trammel public school authorities in the selection of teachers, and also because it falsely presupposes candidates to possess the amount of knowledge essential to an intelligent appreciation and use of such a course of instruction in comparative philology as he has indicated, when in fact the most are entirely ignorant of it. I admit that, on general principles, it is essential for a teacher to be a ripe scholar in knowledge of

the subject which he is commissioned to teach. I am ready to go as far as any in denunciation of the charlatanry, through which ignorance substitutes lifeless mechanical methods for the scholarship which glows with vitality. Moreover, I should forfeit all claim to scholarly instincts and observation, if I did not believe with fervor that the more a person can learn on any and all subjects -learn accurately and thoroughly-the better for him. His acquisitions cannot fail to stand him in good stead. But as I have already reasoned, American school authorities, in the selection of teachers, are hampered by conditions which must inevitably be taken into account. Their range of candidates is limited in the main to recent graduates from the high schools, or, at best, to those who have pursued a couple of years of special training for the work, subsequent to their graduation from those schools. And graduates leave the high schools for these training schools in no condition whatever, as a body, to occupy time with study of the historical development and structure of the language. For they do not yet know enough of the language as it is—not as it has grown to be, but simply as it is—to be able to make a profitable application of such study to the work of the school room. It is a settled principle of the "Science of Teaching," that a broad and appreciative knowledge of the vernacular is a prerequisite to a critical examination of its structure; and its historical development is one element of its structure. For the language had passed through the mutations of its puberty and become well nigh perfected, before either grammar or prosody was even thought of; and not until a comparatively recent period has critical attention been paid to its historical development. And as the language thus had to be perfected before its structure could be analyzed, so there must be a corresponding familiarity with it before the critical study of its history can be of material advantage.

And this familiarity the graduates of our high schools, as a whole, do not possess. Those who are from cultured homes, where good books are numerous and well thumbed, and conversation is enriched with the fruits of study and observation—whose high school training therefore has wrought its work to the best possible effect—are exceptions to this statement. But the majority have not enjoyed such privileges. They have been dependent on their schools alone for their scholarly intercourse with language and literature; and the measure of it, with the limited time at their command, has not sufficed to make them so proficient that they are in a proper condition for the critical analysis of the language and the study of the sources of its formation.

If they propose, therefore, to take a course of special training for the business of teaching—to occupy, say a couple of years,—for the reasons that have been given, their work in English should not at once be scientific and historic, but a preparation for such work. And since we are compelled to seek recruits for our teaching force, as has been said, mainly from among those who are in this preparatory stage of attainment, some of them only recent graduates from the High school, we must of necessity limit our requirements to a knowledge of the subject which stops short of historical development and scientific structure in its range.

At this point I advance my second objection to the position of the teacher to whom I have referred. He bases his disparagement of the standard of attainment in language which public school authorities are content to prescribe for candidates to be teachers, upon the assumption, that, like as in geology, chemistry, botany, etc., the word "comparison" may be called the key word of a teacher's proper and successful instruction, the same principle is to be recognized in the teaching of language. To such an extent does he

carry this proposition as to say that "no one needs more to know the history, the structure, the genius of a language, than the teacher of small children."

My reasoning may be unsound, but as my mind now grasps the subject I am forced to challenge both the logic and the application of this argument. There is good reason why the principle of "comparison," fully recognized among school authorities in relation to geology, chemistry, botany, etc., is disregarded in relation to language. Instruction in geology, etc., deals with things and facts; instruction how to read, only with words as the symbols of things and facts. The pupils of instruction in geology, etc., comparatively mature and able to reason, are sent to nature for principles and processes, and all the steps in the history of the science are direct elements of the development of the work he may have in hand. The pupil learning to read, is an unreasoning child; and the history, structure and genius of the language have no more to do with his instruction than learning the history of the invention of telephony has to do with "wiring" a message from my office to the High school. Instead of regarding a teacher thoroughly expert in knowledge of the "history, structure and genius" of the language as specially adapted to teach small children, I should say to one thus accomplished, "Be careful not to obtrude any of your scientific knowledge into your methods of instruction. It would injure them. Your little pupils would not understand you. Be amply content, if, out of your knowledge of the language as it is, you can start them in the formation of intelligent vocabularies." Not until instruction in language has reached beyond the primary school and even the grammar school, will the application of familiarity with the history, structure and genius of the language be in place.

Moreover, the pupil in geology, etc., realizes no halting place between the full demands of the science and the

initial period of its historic development. Before him, starting with the earliest gropings of scientific inquiry, is a chain of facts which is attached at every point, interlinked and unbroken, to the condition of the science as it claims investigation today. On the contrary, there is in the study of language a point midway between ignorance and thorough knowledge, that is not a mere link in an extended chain, but is a positive independent landing place, an honorable goal which ambition may be proud to win. Though it owes little or nothing to the study of historic development, it is, notwithstanding, definite, scholarly and of transcendent quality and practical value. I mean a knowledge of the language as it is today, in all its richness, beauty and scope. I mean such broad and diligent converse with it through the various channels of its golden literature, wholly independent of its origin and formation, that the mind has become freighted with its treasures and has acquired the power to wield it with intelligent and accurate facility. There is nothing superficial nor delusive about the pretensions of a mind enriched to this extent. Such a knowledge of the English language and literature, accompanied by a proportionate acquaintance with arithmetic, geography and history, is an education; a good, substantial education, not only for the practical purposes of life but far beyond them. There is no play of charlatanry in adopting it as the standard of attainment for inexperienced candidates to be teachers; and justified by its intrinsic value as well as by the constraints which limit us to it, we do thus adopt it, rejoicing to be able to feel that the teacher who is so fortunate as to have such a mastery of it in full possession, since its genial influence is in direct alliance with the express aims of elementary instruction, will be false to his endowments if he do not teach with insight, enthusiasm and effect.

BASIS OF TEST EXAMINATIONS IN THE GRAMMAR SCHOOLS.

In my annual Report for 1884, stimulated by several concurrent attacks in various quarters on school examinations, which were charged with being one of the most conspicuous and pernicious of the errors of the public school system, I made as searching and exhaustive an inquiry into the merits of the prevalent forms of examination as I was able. I closed with a statement of the settled convictions of the School Committee on the subject, and of the regulations pertaining to examinations and promotions which govern the New Bedford schools.

I need not say that, giving expression to the views of the Board as well as my own, I denounced in the strong terms of abhorrence which their enormity justifies, all examinations which statedly occur in public schools as a basis for the distribution of rewards; such as promotions, diplomas, gradations of rank and the distribution of honors; or as tests of the efficiency of the instruction. I analyzed their influence over the hearts of the pupils and the work of the schools, and proved, I think beyond the reach of controversy, that they must inevitably, to some extent, deprave the one, while, to the full, they deteriorate and degrade the other.

In answering the questions, "What is to be the alternative if the offensive examinations be discontinued?" and "What is to determine the fitness of pupils for promotion?" I set forth the alternative adopted by the Board years ago, and still adhered to with a force of conviction which success has strengthened year by year, that right action submits the question of a pupil's fitness for promotion from grade to grade in the same department, to the decision of his teachers. What a perfect farce a test examination to determine merit becomes, subject as its transaction and

results necessarily are to contingencies which negative its justice, in the face of the positive knowledge which the teacher possesses of the standing of every member of his school! How perfectly the daily intercourse of the school room, for months and perhaps years, enables him to know thoroughly the inward character as well as the outward form of every one; and if, when an examination has been finished and its per cents. recorded, the teacher says, "Such a pupil has succeeded who was not worthy to succeed," or, "Such a pupil has failed, who ranks in merit above many who have won," how this judgment, in the forum of conscience, overthrows the decision of the figures, and renders an insistence upon it an injustice and a shame!

Therefore, impressing on the minds of the principals that the standard of their action in the premises is the simple but significant question, Would the advancement of the pupil be to his advantage? we leave promotions from grade to grade in their hands, only ordaining that the name of every pupil defaulted is to be reported to the superintendent with the reasons for his ill-success.

But all this is merely preliminary to what I have specially in view to set forth in this connection. Early in the closing year the Grammar School Committee decided to institute a written examination of the Fifth grade (this includes the highest grammar school classes) for two purposes; one to afford them an opportunity, as a Committee, of passing judgment on the attainments of that grade, it being the representative grade of the school, which could only be accomplished by having before them some definite, visible results of test work. Another—as detailed by the chairman of the Committee in his Report*—to serve as a basis for the distribution of diplomas at the close of the

^{*}See page 22 of this book.

school year, which should cause them to be looked forward to as something of positive value, not to be gained without effort, and therefore to prove a stimulus to ambition and faithfulness. But the execution of the decision involved a very difficult problem. How could a test examination be instituted which on the one hand should not materially infringe the settled policy of the Board that there should be no tests of the kind involving the distribution of honors or rewards, and on the other, should not inflict on the instruction of the classes that most damaging of all the vicious tendencies of stated test examinations—the inoculation of the teachers' minds with such a controlling anxiety to be well prepared for the tests, that generous, thoughtful instruction should be foregone, and the pupils narrowed down to a regimen of unfruitful text book cram?

This problem was entrusted to a sub-committee for solution. They undertook its consideration with lively interest, and settled on the following general points:—First, there shall not be so many of the proposed examinations as to break up the continuity and freedom of the regular school work; Second, they shall not occur at stated intervals, to be anticipated with an anxious expectancy, but at such times, of which no warning shall be given, as the Committee from time to time may direct; and Third, and most important of all, the questions proposed shall be strictly limited to that range of topics which constitute the substantive groundwork of the studies to which they pertain.

More than half the contents of most of the popular text books used in elementary schools are worse than useless. The *arithmetics* are crowded with topics, problems and applications, embracing all the multifarious uses to which the subject can be put in mortal affairs. These are of no possible value to the pupils, while they prevent due attention to those portions which *are* of value, and to other studies of prime importance. The *geographies* and *his-*

tories multiply profitless facts and details, and the grammars marshall the technics of syntax through a long array of illustrations and exceptions wholly beyond the comprehension as well as the needs of elementary pupils. It is these objectionable additions to the sterling portions of the text books which create the most baneful features of ordinary test examinations. For every question missed subtracts a certain per cent. from the aggregate and proportionately perils the result; and since it is uncertain, as such affairs are usually managed, what questions may be asked, what profitless knowledge called for, therefore all the lumbering details which crowd the text books must be forced into the minds of the pupils through a tormenting process of high pressure and cram.

It seemed of the last importance to steer clear of this crying evil,—to draw the line definitely between essentials and non-essentials in the contents of the text books, and limit the examinations rigidly to the former. There are technics, definitions and classes of facts which are the groundwork of the studies to which they pertain, and are the starting points of satisfactory instruction. They must be securely fixed in the memory. There can be no intelligent progress otherwise. A pupil must be able to revert to them as readily as to the alphabet of language or the symbols of arithmetic. This is of comparatively easy accomplishment, for the amount of this fundamental matter is really so limited that it would be a disgrace to a graduating class in a grammar school, if its members should not be able to pass a successful examination upon it, at any time, without the slightest fret or uncertainty.

The sub-committee realized that to define this line of demarkation would grandly accomplish another more general and important result, viz: to leave to the teachers an open and unobstructed field for the broad, thoughtful range of instruction which the text books open into but do not

occupy; which is independent of routine, and scorns to be measured by per cents.

What educational engineer should locate this invaluable division line? The sub-committee called the five grammar principals together and made known to them their position and wishes. They placed in the hands of each copies of the text books, and requested them to con their pages critically and cross out every portion which in their judgment was not of fundamental importance. They would be allowed the necessary time for this work, and then would be called together to compare results.

Fully appreciating the objects held in view by the sub-committee, and delighted at the good results they fore-shadowed, the principals severally performed the allotted task; and when they came together again, their almost absolute agreement with each other and with the Committee in their conclusions, was a subject of mutual congratulation. It was felt to be trustworthy, and the plan and result were reported to the Grammar School Committee, who gave their unanimous approval.

I append a detailed statement of the abridgment made in each study.

ARITHMETIC (BRADBURY'S EATON).—WHOLLY EXCLUDED: "General principles of division;" Work in prime numbers; Definitions and rules respecting "Greatest Common Divisor" and "Least Common Multiple," the work to be done by inspection; Rules for "Cancellation;" All examples in common fractions with denominators greater than 16; Complex fractions; Metric measures; Addition, multiplication and division of Compound numbers; Work on longitude and time; Compound interest, Partial payments, Ratio, Proportion except by analysis; True discount; Partnership; Equation of payments; Square and cube root; Mensuration, except in connection

with angles, plane figures, triangles, quadrilaterals, circles, sphere, pyramid and cone; The reading matter and rules in Numeration and Notation; Rules in the four fundamentals; All such problems in compound numbers as this:—"To find how many of a lower denomination are contained in a fraction of a higher one;" and this:—"Reduce the fractional part of a higher denomination to a lower denomination."

Notes.—The division of fractions to be performed decimally. One rule only to be taught in "Interest."

Grammar (Greene's Introductory). — Only the first or elementary part is retained, with the exclusion of gender and number as to nouns, and mode and person and definition of "transitive" and "intransitive" as to verbs. The only intelligent use that can be made of grammar in a grammar school is to furnish a common medium of communication in reference to lessons in language and composition.

GEOGRAPHY.—The contents of the "Introductory" only, (Harper's) to be the subject of examination, with the elision of most of the map questions.

HISTORY.—All facts which have no definite bearing on the progress of social or political life, all details of battles, the names of subordinate actors in affairs, and the names of places not essential to the memory of the events with which they are connected, to be excluded. Dates to be reduced to a minimum, *First*, by diminishing the number of facts of which the time of occurrence need be memorized; *Second*, by grouping related facts together as far as possible, wherever exactness in regard to the time of their occurrence is not important, and thus making a single date

serve for several facts. To illustrate: 1492—group around this date the facts of all the prominent discoveries, since special dates are quite immaterial.

1565, 1607, 1620—group around these three dates, the first being that of the first settlement on the continent by the Spanish; the second, the first settlement by the English; the third, the first settlement in Massachusetts, the facts of all the prominent settlements.

1789—group around this date the important facts occurring during Washington's two terms as President. So, around the date of the beginning of each administration group the important facts occurring during its continuance.

The dates required to be memorized on this plan are 1100, 1492, 1565, 1607, 1620, 1754, 1775, 1776, 1777, 1781, 1789, 1797, 1801, 1809, 1812, 1817, 1825, 1829, 1837, 1841, 1845, 1849, 1853, 1857, 1861, 1863, 1865, 1869, 1877, 1881, 1885.

Here are only 32 dates in place of the 100 or more with which the text books would encumber the memory, yet every pivotal fact is sufficiently distinguished and localized.

The new basis when formulated reads as follows:

- I. A record in per cents, shall be kept by the principal of each grammar school, in a book provided for the purpose, of the daily work of the pupils of the Fifth grade throughout the year, the markings not to be made at each recitation, but in the form of weekly estimates, founded on impressions and judgment.
- II. A written examination of the Fifth grade shall be had during the first half of the Summer term, on questions proposed by the Grammar School Committee, that shall be strictly limited to the range of topics which constitute the groundwork of the studies to which they pertain, according to the schedule of abridgments adopted by the Committee.

During the latter half of the Summer term, there shall be an oral exam- 'ination of the same grade to test results of instruction which cannot be measured by formal written work.

III. At the request of the Grammar School Committee the principals

shall submit to them in writing the names of any members of the Fifth grade whom they may consider unworthy of receiving a diploma, with a detailed statement of the reasons for such an opinion.

IV. The average per cents. obtained from the two examinations, as modified by the results of the principals' record of daily work, and their convictions as to fitness or unfitness, shall form the basis for the distribution of diplomas.

I may seem to have given to this subject more space than it deserves. But there is nothing which is causing school authorities more perplexity at the present time than this very question, how to provide for examinations and at the same time deprive them of power to produce injurious effects. It has been the most trying question with ourselves; and as I feel confident that we have measurably solved the problem, and freed ourselves from all further misgivings and anxieties, our process deserves a full exposition.

SCIENCE IN THE HIGH SCHOOL.

The recent organization of a department of science in the High school under a competent expert, and the radical change which has been instituted in the method of instruction,—as briefly sketched by the chairman of the High School Committee in his Report*—has effected one of the few remaining improvements necessary to render the school, I dare to say, one of the best appointed, best regulated, and best taught, among this class of institutions in the State.

All over the State are high schools which profess to give instruction in science; and in almost all, even of the highest pretensions, a lamentably unscientific and unproductive method of instruction prevails. It is the name without the reality. The method is to hear recitations on the subject from a text book, perhaps—"heaven save

^{*}See page 19 of this book.

the mark!"—a 14 weeks text book, then for the teacher to supplement these lessons with illustrative experiments by means of the apparatus that the school may possess.

This is merely *playing* school. Scientific instruction is worth little or nothing either for discipline or information, unless it be inductive, sending the learner to nature herself. He must be made an independent investigator, and compelled to hew his own path to the generalizations of the science on which he may be engaged. He must construct his own apparatus in the main, and perform his own experiments. When he is so favored as to enjoy that kind of instruction, he will obtain from his study an admirable mental discipline, and store up information whose accuracy and thoroughness will afford him ceaseless intellectual enjoyment and practical advantage.

I shall limit my observations to the two sciences now considered of paramount importance,—chemistry and physics. The inutility of the prevalent method of instruction in relation to physics is vastly increased whenever, as is commonly the case, it is made one of the regular studies of the youngest class. The pupils of that class, and even of the one next above it, are too young, too immature, to appreciate the true philosophy of the science and study it as it ought to be studied. In corresponding measure, the superficial contact with it which is all that the customary method of instruction affords, penetrates the faculties of the majority only skin deep, and leaves them with a vague, inaccurate smattering of knowledge; a poor amount of a very poor kind.

The evil has still another aggravation. It arises from the unwieldy size of the classes in most large schools. Physics is considered everywhere so practically important for both sexes—since its topics are intimately related to the common affairs of life with which everybody has to deal—that it is usually prescribed as an imperative study for all who enter the school. So it is a literal fact that in the high schools of most of our cities and larger towns, while individual teaching, necessitating classes of limited size, is an indispensable prerequisite for anything worth the name of instruction in science, there are classes in physics having 30, 40 and even 50 members, who are supposed, in fond delusion, to be penetrating the secrets of the study. Individual instruction is wholly out of the question. There is time at the recitations, from day to day, for only a fraction of the class to be called on to answer questions on the text book lesson, and thus, with greater or less smoothness and satisfaction, the travesty goes on.

I am not assuming that here in New Bedford we have been doing any better work in this regard. In what I have said I have been describing precisely our own course of procedure, up to the present school year. Physics has been a compulsory study for the Third grade (the next to the youngest) through the entire school year. The teachers of the grade did the best possible with text book recitations in their regular study rooms, and the principal performed the related experiments at stated intervals before the classes in the philosophy room. I make the statement without the least compunction, for we went along in this way for the same reason that most other school authorities are doing the same thing—because circumstances forced us upon it. We could do no better. All I am concerned to establish is, that we were not blind to the defects of the method; and this I do by calling attention to the fact that in several of my annual Reports I have fully discussed the subject and penned the same opinion which I have just expressed.

We have all along been alive to two other impressions from this method of conducting the study, which have steadily been tending to modify and clarify our convictions. One is that the experiments fail in good part to effect the object for which they are designed. The artistic apparatus employed produces a sense of artifice and unreality, as though it were got up for show, like the glittering paraphernalia of a necromancer. It does not lead the pupils into the bosom of nature. It does not leave the stimulating impression that the forces which create its operations are just the same that are active all around us hour by hour in the details of homely practical life. Clearly apparatus of a far simpler character is in demand.

The other impression was, that the science is out of the range of the predominating characteristics of the female mind. The girls of high schools may float easily along on the smooth surface of the superficial text-book-question-and-answer work which is current, but bring them to close quarters with the philosophy of the subject, and the majority, including many of superior ability and excellent scholarship, confess their distaste and want of power. I shall recur to this point hereafter.

When the new high school house was planned, the Board, earnest to have it replete with the appurtenances of a first class institution, not only provided for a philosophical lecture room and apparatus room, but also for a perfectly appointed chemical laboratory. Previous to coming into possession of the house, chemistry had received very little attention in the school. Afterward it was made an obligatory study during the last year of high school life; but though the laboratory furnished the best possible conveniences for inductive study, the unwieldly size of each annual class prevented making any systematic use of it in that direction, and the instruction was forced mainly upon the counterfeit method so widely in vogue.

I come now, with the greatest pleasure, to speak of the recent organization of the scientific department of the

school, of which the chairman of the High School Committee has given a succinct account;* and if I repeat a few points of his statement, it will be for the purpose of introducing some incidental circumstances which may add to the interest and promise of the new organization.

When Prof. Hathaway was elected teacher of science it was with the explicit understanding that the obligation resting on the entire First grade to study chemistry should be rescinded, and only those should be retained as students in chemistry who were actuated by an earnest love for it and would pursue it inductively with devoted attention. The two classes of the Third grade in physics—each about 50 in number!—he proposed to carry along as already constituted, until it should be determined what changes, if any, should be made.

Under this arrangement he began his duties. The class in chemistry was reduced below 20, leaving it not too large for systematic and thorough inductive work in the laboratory, and went forward to the close of the school year so as to win from its teacher unstinted praise, and delight the High School Committee at the realization of their hopes.

But in regard to the classes in physics it was widely different. In the course of a few weeks Mr. Hathaway made a doleful report. He professed to be accomplishing nothing. The size of the classes was appalling. The boys were learning but little, the girls with a few exceptions nothing at all. It was plain that the constitution of the classes and its effects were driving this teacher, whose ideas of teaching science made him scorn all superficial, delusive pretences, into utter despair. Something must be done to rectify this offensive state of things; and Mr. Hathaway and the superintendent were posted off to gather up facts and suggestions from other schools.

Of course we went for suggestions to acknowledged

^{*}See page 20 of this book.

experts. Among others, we had a protracted interview with Mr. Gage of Boston, the accomplished scientist, whose text books and apparatus are so widely in demand. He was peculiarly fitted to enlighten us, for prior to his transfer to his present situation as teacher of science in the Boston Boys' High school, he had for many years occupied a similar position in the Charlestown High school, where he had mixed classes of boys and girls. The result of our conference was his emphatic declaration of the following principles, as being essential to make our scientific department a perfect organization:

- 1. The study of chemistry and physics both must be placed in the upper grades; for there is not maturity enough in the younger grades to grasp their philosophy.
- 2. The classes must be so small—not to exceed 20 pupils in number—that there shall be opportunity for laboratory instruction on the basis of thorough original investigation. No other kind of instruction is worth the having.
- 3. The classes in physics must be limited to the boys, except such girls as have a strong leaning towards the science and manifest a decided aptitude for it. The female mind, in general, is not so constituted as to apprehend its philosophy.

Mr. Gage made this last assertion with strong emphasis. He added that his long experience in teaching the study to girls justified him in speaking authoritatively. I was very glad to learn that he held such convictions, for they accorded with the belief of the New Bedford Committee, and more or less with that of the various teachers of mixed classes whom we consulted. While there were those who doubted whether the defective power of girls over the study was to be attributed to constitutional inaptitude rather than to a bias derived from the peculiarities of their domestic and social training, there were few or none who did not admit that the defect exists.

Laden with the fruits of their inquiry, Mr. Hathaway and the superintendent returned and presented them to the High School Committee. The result of the consequent deliberation was the organization of the scientific department of the school, as it has been clearly detailed by the chairman.* Physics was removed from the Third grade to the Second, to be obligatory on the boys, elective with the girls, and to have four lessons a week the entire year. Zoology and botany were made obligatory on the girls, the former to occupy the Fall and Winter terms, the latter the Summer term; and chemistry was ordained to follow in the First grade, under the same conditions as pertain to physics in the Second.

I have placed the above regulations in italics, as being worthy of special consideration. For they endorse solid principles, which, in their complete relationship, have not as yet found place in the curricula of any other high schools having mixed classes of girls and boys, and therefore confer on our school a proud preëminence. And since all the necessary provisions have been made to carry this new system into full and thorough effect, a physical as well as a chemical laboratory, with the requisite appertenances, having been supplied, and a teacher of superior scientific knowledge and skill employed, I would centre the attention of our citizens on the unrivalled advantages which our High school now affords. This position given to science has been the one thing wanting to dislodge from the work of the school every lingering remnant of what might be characterized as sham, round it out into harmonious proportions, and enable it to justify its pretensions to be a first class secondary school—the jewelled crown of our public school system. To quote from the Report on the High school, "with a corps of teachers of acknowledged ability and skill, with subjects and methods of study

^{*}See page 20 of this book.

adjusted to combine as far as possible practical usefulness with mental discipline and broad acquirements, and with appliances which the liberality of the School Board and the resources of the Howland fund have supplied," no pupil can fail of acquiring an education in the truest sense, who is not false through indifference and inattention, to his opportunities and himself.

It is a significant corroboration of the truth of the assumption that girls have a distaste for physics, that not one of the present Second class chose that study in preference to zoology.

All science is to be taught on the same intelligent plane. Mr. Bonney, the sub-master, to whom the charge of the study of zoology was assigned, has carried his classes forward armed with tray, pie-pan, forceps, scalpel, finder, teasing needles, note book, microscope, and all and sundry everything else necessary for object lessons, beginning with the rudiments of the subject and gradually developing the plan until the classes become advanced enough to take up classification. And he has enkindled in their minds an enthusiasm in the pursuit responsive to his own, which has imparted deep interest and value to his instructions.

Meanwhile, there in its protecting cases, in imposing display, stands our elaborate apparatus unused. It has cost more than \$3000. We have been accustomed to regard it with proud satisfaction and from time to time have pleaded earnestly for its enlargement. We have pitied those poverty stricken schools which have not been able to invest an indefinite amount of funds in this expensive paraphernalia. We shall do so no longer; for we have come to realize that the degree of interest enlisted in behalf of such scientific helps is in direct proportion to the degree of ignorance of what true scientific instruction

really needs. When high school authorities generally have established their work in science on a right foundation, the manufacturers of philosophical instruments will be driven into bankruptcy. Of course there are some important topics which can be illustrated only by means of costly instruments; but they are few. Of the remaining apparatus we have no need, for it can do no service. What once involved an outlay of many dollars is now accomplished with only a few cents. The homely, commonplace media through which the forces of nature operate in the world, found in households, fields, shops, highways and byways, supply also the appropriate media for illustration of their processes and effects.

I have spoken of our revolution in the teaching of science as the accomplishment of the one thing wanting to render the High school a model institution. I have reference only to those subjects of study about the propriety and usefulness of which there is no controversy. There is another subject, the target of violent opposition as yet, but steadily and rapidly making its way towards a final triumph, which must be added to the present curriculum, before the school will be thoroughly equipped; I mean industrial training in various forms for both sexes.

I advert to the subject, on which I have repeatedly expressed myself, only because the tenor of my remarks about the work of the school seems to call for it. When the matter was first broached and began to claim attention, I studied it with the most thoughtful consideration, and arrived at the conclusion not only that hand training is a positive form of mind training, and perfectly consistent with the purposes of public schools, but also that the demand for it to be attached to the work of those schools was the voice of American society urging its needs, and that there would finally be a pressure of public opinion which would make

its introduction inevitable. That time is fast approaching.

The New Bedford School Committee I believe to be too wisely progressive to need to be driven to adopt a needful measure under whip and spur. But at present no method seems to open by which the change can be conveniently effected with any class of the schools. For I should discountenance any such partial experimental arrangement as is in progress in Boston and elsewhere, whereby membership of the industrial school is made the reward of superior scholarship and is limited to a comparative few. It is the poorer scholars probably who will need trained muscles in their maturity, rather than the better ones,—the indiscriminate mass rather than the selected few. Let all, therefore, of proper age and position have the advantage, or none. Others have brought the tentative experiment to a sufficiently successful issue to satisfy any reasonable mind. No more experiments, then, but the broad reality.

It is a grateful fact that Mr. Huling, the new principal of the High school, adds to his rare qualities as a man and a teacher, a wholesome abhorrence of traditional routine, and through his lively interest and unsparing effort, has greatly aided in effecting those changes in the organization of the school which have contributed so largely to its efficiency.

BASIS OF ADMISSION TO THE HIGH SCHOOL.

The mutations which have taken place of late years in the basis of admission to the High school illustrate the readiness of the Board to make an experiment, whenever an untried principle or method in education promises fruitful results, or whenever the superiority of one or the other of rival principles or methods can be determined only by experiment. There is no tame spirit of hesitancy to disturb what exists, on the hackneyed conservative plea that "it is best to let well enough alone."

The old-fashioned method of admitting candidates to the High school by means of a stringent written examination to be determined by an arbitrary standard of per cents., with its harassing and trammelling influence over the instruction of the candidate classes during their previous year's work in the grammar schools, was done away with long ago. In its stead a basis of admission was adopted in the following terms:

A written examination of the first grade in the grammar schools shall be carefully had from written questions, at the end of each term, upon the studies of the term immediately preceding, and the result shall be recorded in a book to be kept for that purpose.

The principal of each grammar school, when called on, shall submit to the High School Committee a list of his first grade, divided into three sections; the first, embracing the names of those whom he considers unqualifiedly fit to be advanced into the High school; the second, the names of those who, he thinks, would better be advanced, but who have some disqualification, and the nature of the disqualification shall be stated; the third, the names of those whom he considers unqualifiedly unfit for the High school. He shall attach to each name the average percentage obtained by its owner from the written examinations before described.

On or near the last week of the Summer term, the High School Committee and the superintendent shall together make an oral examination of the candidate classes, that shall be both general and specific in character, and cover the whole ground of the preparatory studies, and shall carefully mark each scholar's recitations. The average per cent. shall be obtained from these two forms of examination, and from this basis, modified as far as they may deem it expedient by the statement of the principal already provided for, the High School Committee shall prepare a list of names to be recommended to the General Committee for admission to the High school.

Let it be confessed that the governing motive of this basis was the purpose to trust implicitly the teacher's recommendations; and the provision for an oral examination was a sort of subterfuge to shield the teachers from charges of favoritism. And it is in point to state

that in not a solitary instance was this trust abused or found at fault.

But at length this substitute was called in question. The judgment of the principals of the grammar schools as to the fitness of candidates, counted as a disqualification such a degree of mental inferiority or of the absence of scholarly attributes as clearly evinced that admission to the High school would prove of very little benefit to the individuals concerned, while it would largely increase the cares and labors of the teachers and surely lower the standard of scholarship in the school.

In opposition to this discrimination it was argued that no defects of intellect, energy or temper should influence school authorities to bar out a child from any school for which, in regular progress, he is a candidate. Every parent has a moral and legal claim that his child, gifted or ungifted, shall have a fair chance at the existing opportunities to acquire a complete education. If he neglects or misuses them the worst is his own. Why not apply the same rule of promotion in mass which is so successful in reference to the lower grades? On what ground is a great gulf supposed to exist between a grammar school and the High school, so that a formidable ordeal must be undergone before it can be crossed? Are not the studies of the curriculum uniformly progressive from the elementary work of the lowest primary grade to the graduating class in the High school, thirteen annual removes in advance? Are not these studies imposed on the pupils throughout the course, one after another, on the common basis of maturity sufficient to attack them intelligently? Is not the division of the grades into several departments primary, grammar, high-actually an arrangement purely for convenience of administration?

Here was an argument with a basis of positive truth and it seemed worth the while to defer to it. So the examinations were thenceforth abolished, and all the candidates admitted without question, except in cases of extreme unworthiness.

The result of this course of procedure has been clearly depicted in the Report on the High school.* I will not repeat the tale. It is painful, but the experiment has been a wholesome one. It has settled a question that might otherwise have risen into perplexing prominence from time to time.

For myself I have uniformly felt that there is truly a gulf between the grammar school and the High school, such as is found in no other connection. There are three recognized stages of mental development, as is well known—the "perceptive," the "conceptive" and the "reasoning." These supervene very gradually one upon another in the normal order of development, so that there is really no period in a child's progress to maturity at which a marked change occurs in the characteristics of his mental action. And this is as true of his passage from the conceptive to the reasoning stage, as from the perceptive to the conceptive. The youth who enter the High school in September possess pretty much the same powers as when they graduated from the grammar schools in June.

But the methods of study in the High school are so different from those prevailing in the grammar schools as to define quite distinctly the passage of the mind from the conceptive to the reasoning stage. The work of the High school presupposes the attainment of mature capacity and makes demands accordingly, and it is idle for those who cannot comply with its demands to undertake its work. As the chairman of the High School Committee has reasoned, some adequate preparation, some positive qualifications, some degree of mental fitness, should be required. These three classes of minds, the essentially weak, the

^{*}See page 14 of this book.

constitutionally void of interest in what may be termed distinctively "book-learning," and the doggedly averse to intellectual labor, are out of place in such a school. It is supremely foolish to insist on an abstract right in the face of manifest disadvantage. Not only are such youth gaining nothing from their school privileges, but they are correspondingly losing precious time, during which they might be fitting themselves for some practical occupation.

It is well, as I have said, that a trial has been made of both ways of solving the problem, to such an extent as to exemplify which is the right, and make the method finally adopted permanent.

The new regulation, however, is not a literal reproduction of that which was formerly in force. The conditions have been abridged and simplified. It is in some respects identical with that adopted by the Grammar School Committee as a basis for the distribution of diplomas, and reads as follows:

- I. A record in per cents. shall be kept by the principal of each grammar school, in a book provided for the purpose, of the daily work of the pupils of the Fifth grade throughout the year, the markings not to be made at each recitation, but in the form of a weekly estimate, founded on impressions and judgment.
- II. The principal of each grammar school, when called on, shall submit to the High School Committee a list of his first class, divided into three sections; the first, embracing the names of those whom he considers unqualifiedly fit to be advanced into the High school; the second, the names of those who, he thinks, had better be advanced, but who have some disqualification, and the nature of the disqualification shall be stated; the third, the names of those whom he considers unqualifiedly unfit for the High school. He shall attach to each name the average percentage obtained by its owner from the record of daily work before described.

III. The average per cent. obtained by the Grammar School Committee from their examinations for the distribution of diplomas will be accepted by the High School Committee, and from this basis, modified as far as they may deem expedient by the returns and statements of the principals already provided for, admissions shall be made to the High school.

Thus test examinations interfering with the regular work and *morale* of the schools are reduced to a minimum.

PHYSIOLOGY AND HYGIENE IN THE PUBLIC SCHOOLS.

Neither of the chairmen of the departments in his Report—the subject not coming within the specific range of duty of any one—has explained the attitude of the Board in reference to the teaching of physiology in the schools, with express reference to the effect of alcohol and narcotics on the human frame. There has been only a casual reference in one or two of the Reports to the adoption of a certain text book on the subject. I feel that the Board would be exposed to unjust suspicion of indifference, if not of intentional neglect, were my own Report silent also, and I am happy to give the subject due consideration.

From the first the members of the Board have heartily responded to the interest which the "Women's Christian Temperance Union" has manifested to have the evil effects of indulgence in alcohol and narcotics impressed on the minds and hearts of the children of the land. They have felt with lively sympathy in the movement, that the hearts of the children are the most promising ground in which the seed can be sown of a reform of social evils which threaten fatally to pollute the moral condition of society, and are the occasion of vast public expenditure and untold miseries. They have been ready to acknowledge that school authorities, themselves among them, have not been alive to what might be accomplished in this direction, and have received with a spirit of submissive deference the commands of the legislature what to do.

But they have not been stirred by a temporary impulse of feeling, responsive to the popular excitement, to plunge hastily into action which they might afterwards regret. They have reflected that this is not the question of a day nor of a year—to be suddenly provided for, with the expectation of as sudden an abandonment; but that a permanent leverage is to be established in the schools against the evils of intemperance, which must therefore have the conditions of permanence. It is in this connection that they see reason to doubt the wisdom of some details of the Massachusetts Educational Temperance Law.

It demands that physiology, with express reference to the effects of alcohol and narcotics on the human system, shall be taught by means of text books as a regular branch of study, to all pupils in all schools; and this, as interpreted by the enthusiastic originators of this legislation, means an immediate placing of text books on the subject in every class. They seem to regard the pupils in the public schools as a vast aggregate of youth none of whom are receiving the precious instruction that is expected to accomplish such exceeding good; to reflect that they will all hereafter have the same dreadful temptations and should all be plied with the same counteracting influences; and therefore every class of every school should be immediately started in temperance class book work.

But the children are not to be turned out upon the world after this present year's schooling. They are to have a progressive school course. Those in the primary department will in due time be members of the grammar department, and so forward. And have those who are so persistently urging to have text book work begun and continued in every grade reflected what such a course means and what would come of it? Have they foreseen that it would result in a monotonous and repulsive repetition of the same exercise from grade to grade, than which nothing could be devised better calculated to destroy all sensibility to the very object had in view? If this were a cumu-

lative study, like reading, or geography, where successive reproductions in higher grades means a corresponding enlargement of the field of observation and intelligence, it would be another thing. But it is emphatically otherwise. The enlargement in the case in question can be only in the direction of a wider range of scientific physiology,—and that is precisely what we do not want. Physiology, as such, has been tried in our grammar schools again and again, and finally and permanently rejected as unfitted, save to a very limited extent, to the immature minds of their pupils. The relations of temperance to physiology, so far as children have any concern with them, are quite limited. When they have once been taught, the field of instruction has been exhausted; and persistent repetition, instead of deepening salutary impressions, would blunt and erase them. Every practical teacher knows that.

But I have not discussed the most important aspect of the subject. Text book instruction has been demanded, corresponding in kind and extent to that given to arithmetic, geography, etc., just as though the desired results were to be reached through the same mental processes which are at work in regard to them. But how wrong such an expectation is! The ordinary studies of the schools are matters of cold intellectual attention, and the direct fruits are purely intellectual; but the vital object of temperance instruction centres not in the intellect but the affections. It contemplates bringing THE WILL into an attitude of resolute determination against pernicious indulgences. And this places it entirely apart from all the ordinary school exercises. Formal text book study will not accomplish this great end-no, not though the books present the damaging effects of indulgence in the most vivid as well as lucid manner; especially if it be repeated in the same or equivalent forms. There must be a heart behind the text books uttering itself in the accents of intense conviction and sympathy to waiting hearts, or their warnings will be of little avail. The confidence placed by the ardent friends of educational temperance on text book instruction is in good part, I am sorry to say, a fond delusion.

How emphatically this truth is exemplified when we consider the influence of the Gospel over the lives of mankind. There are countries in which "Religion" is part of the public school course of study. It engrosses one or two hours of every day of every year. The children are brought face to face with the laws of God as embodied in the Bible and in the ritual of the church. And where are there plainer warnings against all excess than in the Gospel? Where are there more persuasive invitations to holiness of life as the all in all? Yet in some of those very countries in which there is so much time devoted to the study of religion, Protestant as well as Catholic, there is the greatest comparative sensual indulgence by the masses of the people. It is such forceful examples that have led me earnestly to oppose the views of those who would introduce express religious instruction into our public schools. It is the teacher's personal soul-life alone that can kindle the spark of corresponding life in the souls of her youthful charge.

We arrive at the conclusion then, that when there has been sufficient text book instruction to make known the relation between physiology and temperance, the further treatment of the subject must be left to the teachers, in the feeling that repetitive text book work will destroy the very object at which we aim; and we indulge the hope that they will be so ceaselessly inspired by its surpassing importance and a sense of their personal responsibility, that none shall find occasion to accuse them of inattention and neglect.

In what I have said I have freely expressed my personal views, not attempting to interpret closely the convictions of the Board. Yet I think I have not gone far astray from

them. Waiting long for the publication of books on the subject which they were willing to place in the schools, the Board have at length adopted the "Health Primer," an admirable little work, which is to be read in the upper grade of the primary schools and the lowest grade in the grammar schools. And as there has for some time been a text book on physiology with its temperance connections in the Fifth or upper grade of the grammar schools, no other books have been adopted. The Committee on Grammar Schools have approved for the present of the custom of the principals to have a serious talk on the subject with each of their grades, after the opening morning exercises, once a week. If these talks be full of spirit, and enforced from time to time with fresh illustrations drawn from the passing life of the world, which supplies such a harrowing multitude of them, it cannot be but that good seed will be planted whose fruits will follow the youth from the school room into active life.

DRAWING.

The system of elementary drawing, combining book and object, perfected by Messrs. Prang & Co., of Boston, has been placed in the primary department and is in successful operation. The means for the purchase of geometric figures and models which illustrate the system were readily granted by the Committee on the Howland Fund, and I have the utmost confidence that the high expectations which we have centered on this new method will be amply satisfied.

TRUANT OFFICER'S REPORT.

The truant officer, Mr. Nathan L. Paine, has made the following statistical Report of his operations during the past year:

Number of families visited,	425
Number of truants arrested and sent to Truant school,	12
Number of children personally interviewed,	1,405
Number put on probation,	6
Number at present in the Truant school,	12

There is comparatively little truancy in New Bedford, which is owing, in good part, to the prompt efficiency of our truant officer. Every case submitted to him by the teachers is attended to before it gets cold, and the boys have learned so universally that the way of the transgressor is hard, that few venture to violate the rules.

In performing his duties in relation to the children at work in the mills, Mr. Paine is equally prompt and efficient. In regard to compelling the return of girls to school after a term of service in the mills, he is helpless, as we have no mode of punishment for default—no truant school sentence which can be held up as its inevitable consequence.

The combination of good sense, firmness and warm affections in his character is conspicuous in his treatment of those cases in which degrading home influences are more to blame for the neglect of school than the evil disposition of the offenders, and angry passions have to be encountered and allayed.

Respectfully submitted.

HENRY F. HARRINGTON.

LIST OF TEACHERS AND THEIR SALARIES.

FEBRUARY I, 1887.

HIGH SCHOOL,	Ray Greene Huling,	\$2,500
	Charles T. Bonney, Jr.,	1,600
	Charles R. Allen,	1,100
	Sarah D. Ottiwell,	800
	Lizzie P. Briggs,	800
	Lydia J. Cranston,	800
	Mary E. Austin,	800
	Lucretia N. Smith,	800
	Carrie E. Hatch,	700
	Emma H. Wheeler,	600

GRAMMAR SCHOOLS.

E C	A 11 T2 - 337 1	
FIFTH STREET,	Allen F. Wood,	. 1,700
	Mary A. Kane,	550
	Sarah A. Carr,	550
	Sarah E. Stoddard,	550
	Mary E. Allen,	550
	Lydia Macreading,	550
	Emma J. Ashley,	550
	Lizzie Brightman,	550
	Kate N. Lapham,	550
	Jeannette Hunter,	550
	Helen L. Hadley,	550
	Helena Kennedy,	425

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THOMPSON STREET,	George Rugg,	\$900
	Mary A. Macy,	550
	Abby F. Sullivan,	550
	Sarah W. Almy,	550
	Helen C. Allen,	475
	Annie O'Connor,	475
	Helen J. Kirke,	475
MIDDLE STREET,	George H. Tripp,	1,700
	Catherine Commerford,	550
	Mary R. Hinckley,	550
	Hannah C. Arey,	550
	Clara Vincent,	550
	Agnes J. Dunlap,	550
	Hattie Hart,	550
	Mabel Cleveland,	550
	Mary G. Bonney,	475
	Lucy B. Fish,	475
	Maria B. Clarke,	425
Parker Street,	Charles E. E. Mosher,	1,700
	Eliza J. D. Shepherd,	550
	Martha A. Hemmenway,	550
	Helen M. Gordon,	550
	Mary A. Codding,	550
	Sarah L. Spare,	550
	S. Flora Spare,	550
	Anna L. Jennings,	550
	Emma Shaw,	550
	Anna Braley,	550
	Emma A. McAfee,	500
	Josephine Almy,	500
	Emma C. Nash,	500

1887. SUPERIN	TENDENT'S REPORT.	93
PRIMARY SCHOO	DLS.	
LINDEN STREET,	Elizabeth P. Spooner,	\$550
,	Lucy S. Leach,	475
	Isabella Luscomb,	475
	Mary E. Sturtevant,	475
MERRIMAC STREET,	Sarah H. Hewins.	550
The state of the s	Addie West,	475
	Isadora Foster,	475
	Hattie S. Damon,	375
MAXFIELD STREET,	Mary B. White,	# # A
MIAXFIELD STREET,	Sarah E. Field,	550
	Annie E. Pearce,	475
		475
	Bessie Nash,	425
CEDAR STREET,	Annie S. Homer,	550
	Abby D. Whitney,	475
	Emma B. Allen,	450
	Willetta B. Nickerson,	425
	Annie L. Edwards,	400
Kempton Street.	Eleanor Commerford,	550
	Bessie P. Peirce,	475
	Kate Cleary,	475
	Ida G. Howard,	450
Fourth Street,	Sarah H. Cranston,	£ £0
TOORIN DIRECT,	Sarah E. Sears,	550
	Eliza H. Sanford,	475
	Nancy H. Brooks,	475
	Clara B. Watson,	475 475
		T/.)

94 CITY	DOCUMENT No. 6.	Ĵanuary,
DARTMOUTH STREET,	, Isadore F. Eldridge,	\$550
	M. Eva Schwall,	475
	Sarah H. Kelley,	475
	Annie Carpenter,	475
WILLIAM STREET,	Abby F. Bryant,	550
	Amelia Lincoln,	475
	Mary J. Graham,	475
	Clara C. M. Gage,	400
ARNOLD STREET,	Susan M. Tompkins,	575
Grove,	Jane C. Thompson,	550
	Sarah E. Tuell,	475
	Hattie Finlan,	475
	Nellie Davis,	475
	Mary Barstow, per week,	8
Acushnet Avenue,	Jane E. Gilmore,	550
	Sarah E. Kirwin,	475
	Mary J. Eldridge,	475
	Minnie E. McAfee,	475
	Susie Lucas,	475
	Marianna Richmond,	475
	Carrie E. Pitman, per wee	
CEDAR GROVE ST.,	Lucy F. Clarke,	550
	Emily A. Delano,	400
	Carrie Shaw,	400
·	Flora Estes,	400
COUNTRY SCHOO	LS.	
Acushnet,	Charlotte C. Carr,	700
	Mary F. Sylvia,	500
	Selene E. Sherman,	325

1887. SUPERINT	TENDENT'S REPORT.	95
Rockdale,	Alice L. Tripp,	\$450
CANNONVILLE,	Jennie S. King, May L. Petty,	500 450
CLARK'S POINT,	Lillie B. Allen, Annie L. Macreading, per	500 wk., 8
North,	Mary Ashley,	475
PLAINVILLE,	Ruth A. Allen,	350
MILL SCHOOLS.		
North Mill School,	Emma R. Wentworth, Annie P. Underwood,	Per week. \$15.50
CENT'L MILL SCHOOL	Lucy J. Remington,	14.00
Arthur Cumming, teach Fred. L. Diman, teach		Per year. \$1,650 1,400
SEWING TEACHE	RS.	
	Carrie Richmond, Eliza Smalley, Gertrude Leonard,	500 200 200
EVENING SCHOOL	LS.	
South School,	Oliver W. Cobb, Mrs. S. C. Whelden, Joseph P. Kennedy, Mrs. Kate Johnson, Chella Carpenter, Carrie S. Silva, Nellie Eldridge,	Per week. \$11.00 8.00 7.00 7.00 6.50 6.00

CENTRAL SCHOOL,	Mrs. S. W. Wilde,	Per week. \$10.00
	Cora Cleveland,	7.00
	Kate Sweet,	6.00
North School,	Robert F. Raymond,	11.00
	Nathaniel W. Gifford,	8.00
	Clara Harris,	7.00
	Eloise A. Hafford,	7.00
	Lillie C. Tillinghast,	6.00
	Lizzie E. Omey,	6.00
	Sadie L. Tallman,	6.00
	Mrs. Ruby M. Tripp,	6.00
	Grace H. Potter,	6.00
	Abby R. Johnson,	5.00
	Annie G. Brawley,	5.00

1887-CITY DOCUMENT No. 7.

EIGHTH ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE CITY OF NEW BEDFORD,

TO THE

CITY COUNCIL.

FOR THE YEAR 1886.

NEW BEDFORD:
MERCURY PUBLISHING CO., CITY PRINTERS.
1887.



BOARD OF HEALTH.

The Board of Health respectfully make to the city council their eighth report of the doings of the Board for the year 1886.

The Board is composed as follows:

James D. Thompson, term expires February, 1888.

William N. Swift, City Physician and Quarantine Physician, term expires February, 1889.

Robert W. Taber, term expires February, 1887.

The Board was organized February 2, 1886, as follows: James D. Thompson, Chairman.

William N. Swift, Physician to the Board and Quarantine Physician.

William E. Macomber, Health Inspector.

April 22. Ordered by the Board, that all vessels arriving at this port from foreign ports between the first day of May and the first day of November, 1886, go into quarantine, and remain until visited by the quarantine physician, and by him allowed to enter the upper harbor.

All pilots are directed to be governed by this order.

April 30. The following order was passed this day. That no permission will be granted by this Board for reinterment of any body unless the written consent of the superintendent of burial grounds be first obtained.

May 27. Notified his honor the mayor and aldermen, as follows:

Gentlemen: The Board of Health would call your attention to a nuisance existing on South Second Street, at the old brook near the Eagleton house, so-called, and would

earnestly recommend that a pipe sewer be laid, which would remedy the evil complained of.

June 16. Notified the mayor and aldermen of a nuisance at the foot of Union street, caused by the discharge of the Union street sewer, and recommended its abatement without delay.

During the year many sewers have been built which in the opinion of the Board will add much to the convenience and health of the citizens. One hundred and eighty-four licenses have been granted by this Board for entrance by individuals.

The number of licenses granted by the Board for emptying privy vaults and cess-pools is sixty-one.

Forty-five permits were given for re-interment of bodies in the several cemeteries.

Frequent complaints have been made to the Board of the imperfect manner in which a large portion of house plumbing is done in the city, which in our opinion is injurious to the health of our citizens. We recommend a radical change be made in this particular by which this defect would be remedied.

The number of deaths received at this Board are as follows:

1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
683	621	546	606	573	598	732	674

The percentage of deaths for the year is $20\frac{183}{1000}$ per thousand. The number of nuisances examined by our health inspector is one hundred and ninety-eight. The inspector has been faithful in his examinations.

QUARANTINE.

The quarantine physician's report, together with his report as city physician, is as follows:

REPORT OF THE CITY PHYSICIAN.

DEATHS REPORTED TO THE BOARD OF HEALTH FOR THE YEAR 1886.

The second secon													
DISEASES.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
Total number of deaths	52	54	66	58	50	40	51	57	76	57	57	56	674
Aneurism	2 0			1					ĭ			30	2
Apoplexy ······	1	2	2	$\hat{2}$	2	2	1	1		2	5		$2\overline{0}$
Atelectasis Pul				1	1					ī			3
Burns		2		î									3
Bronchitis		3	1	6	2	1	1		1		1	1	17
Cancer	1	2		1	2		1	2	1	4	3	3	20
Puerperal diseases		1		1									2
Cholera Infantum						1	9	7	5	1			23
Convulsions	6	3	2	3	3	2	5	3	5	1	3	3	39
Croup	1			4								1	6
Debility	4	3	5	2	2	4	2	1	5	3	2	3	36
Diabetes Melitus	1		1	2	1		1		4	1	1		12
Diarrhœal diseases	1		1		3	1	5	11	8	8	2	7	47
Diphtheria	2		٠.			1	٠.			1	2		6
Disease of the Brain		2					1	1			1	3	8
Disease of the Heart	4	5	1	1		5	3	5	6	1	6	10	47
Disease of the Kidneys	3	3	4			2	1			3	2	1	19
Disease of the Stomach	2						2				1		5
Dropsy (General)		٠.	٠.	٠.				٠.	1				1
Drowned	1			• •	1		1		2				5
Dysentery		٠.	• •	1		• •	2	3	3		2		11
Erysipelas	1	٠.	• •	• •	2	• •	• •	٠.	• •	• •		• •	3
Scarlet Fever	2		• •	• •		• •			• •	• •			2
Gangrene Senile		• •	• •	1				• •	• •	• •	• •	• •	1
Hernia		٠.	• •	1	• •	1	• •	0 0	• •	• •		• •	2
Hemorrhage	1	• •	2	*	7 0			1	1	1		• •	6
Hydrocephalus	• •	l	1	1	1	• •	1	• •	• •	• •		• •	5
Intestinal Obstruction		1		• •		• •			• •	• • :	* *	• •	1
Meningitis	2 1	2	3	$\frac{2}{1}$	$\frac{2}{1}$		* •	2			4	1	18 10
Meningitis, Tubercular	1		1		1	1	* *	• •	$\frac{2}{1}$	1	1	1	$\frac{10}{2}$
Old Age	.4	1	3	2	2		4	4	1	7	• •	1	29
Paralysis	• •	2		1	2			1	1	2	3	1	13
Pneumonia	2	4	10	9	6	5	* 1	1	4	3	1	3	48
Pleurisy			1	0				1	-		1	0	1
Premature Birth			î	2					1				$\frac{1}{4}$
Pyæmia		1						1					$\hat{2}$
Rheumatism			1	1						1			3
Septicæmia					1			1					2
Suffocation by Coal Gas												1	ī
Uramia					1					1			$\frac{1}{2}$
Whooping Cough			3						1				$\frac{1}{4}$
Accident					1		!		2				3
Phthisis			16	6	5	9	4	7	$1\overline{2}$	9	10	8	106
Progressive Locomotor Ataxia			1			1	1						4
Peritonitis	1		1	!		1		1	1		1	2	8
					-							_	

Disease of Liver 1 1 2 1 7 Cyanosis 1 1 1 1 1 1 1 1 1	DISEASES.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	T'otal.
Osteomyelitis 1 1 Imperforate Anus 1 1 Myelitis 1 1 Malarial Fever 1 1 Extra-Uterine Pregnancy 1 1 Addison's disease 1 1	Cyanosis Typhoid Fever Alcoholism Cystitis Hip disease Laryngitis Tub Syphilis Choking Edema of Lungs Suicide Opium Poisoning Child Birth Caries of Skull Ovarian Tumor		1 2		1 1		2	1	3	5	1	2	• • •	1 27 1 3 1 1 1 1 3 4 2 1 1
	Osteomyelitis. Imperforate Anus Myelitis. Malarial Fever Extra-Uterine Pregnancy.		• •	• • • • • • • • • • • • • • • • • • • •	• •	• • • • • • • • • • • • • • • • • • • •	• •		• •	1	• • • • • • • • • • • • • • • • • • • •	1 1	1	1 1 1 1 1 1

REPORT OF CASES OF CONTAGIOUS DISEASES FOR THE YEAR 1886.

DISEASES.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
Diphtheria	8	77	5	$\begin{vmatrix} 2\\2\end{vmatrix}$	2	1 2	 5	4	4	8	8 8	6 5	34 63

REPORT OF CASES OF TYPHOID FEVER.

Reports of cases as occurring before Sept. 7th, 1886, 61. Sept., 45; Oct., 31; Nov., 12; Dec., 2. Total, 90.

WILLIAM N. SWIFT, City Physician.

REPORT OF NEW BEDFORD QUARANTINE FOR 1886.

From May 1st to November 1st, 1886, boarded 21 vessels arriving from foreign ports.

No vessels were detained in quarantine as they brought no cases of contagious diseases.

WILLIAM N. SWIFT, Quarantine Officer.

JAMES D. THOMPSON,
WILLIAM N. SWIFT,
ROBERT W. TABER,
Board of Health.

In Board of Aldermen, Jan. 13, 1887.

Received, ordered printed in the City Documents, and sent down for concurrence.

D. B. LEONARD, City Clerk.

In Common Council, January 13, 1887.

Concurred.

WM. A. MACKIE, Clerk.

THE

AUDITOR'S ANNUAL REPORT

OF THE

RECEIPTS AND EXPENDITURES

OF THE

CITY OF NEW BEDFORD,

INCLUDING

REPORT OF CITY TREASURER AND COLLECTOR OF TAXES,

FOR THE

FINANCIAL YEAR ENDING JAN. 3, 1887.

NEW BEDFORD:

MERCURY PUBLISHING COMPANY, CITY PRINTERS. 1887.



CITY OF NEW BEDFORD,
OFFICE OF THE CITY AUDITOR, February 23, 1887.
To the Honorable the City Council of New Bedford:

Gentlemen,—Herewith I have the honor to submit the annual Report of all the receipts and expenditures of the city, for the financial year ending on the first Monday in January, 1887, together with a statement of the city debt, a schedule of the real and personal property belonging to the city, and the estimated value thereof, and such other statements as I have deemed of interest.

Very respectfully,

WILLIAM B. TOPHAM, City Auditor.

AUDITOR'S REPORT.

JAMES H. HATHAWAY, Esq.,

CITY TREASURER,

\$1,116,967.00

DR.

1886, Jan. 5. To balance,	\$19,903.98
Appropriations, general, 1884,	\$2,205.17
" 1885,	7,175.79
" 1886,	399,267.86
" special, 1885,	55,000.00
" 1886,	30,000.00
Cemeteries,	2,365.00
Cemetery Funds,	390.00
Com. of Mass., Chap. 252,	6,523.75
" 301,	7,316.00
" Bank Tax Account,	11,123.95
Fire Department,	339.24
Free Public Library, Trustees,	3,250.36
" Dog Fund,	782.52
Highways and Streets,	16,269.25
Incidentals,	200.00
N. B. School Committee,	3,003.30
N. B. Water Works,	47,763.69
Police Department,	3,847.79
Poor Department,	9,138.48
Public Debt,	160.42
Public Schools, Incidentals,	6.60
" Pay of Teachers,	32.00
" Dog Fund,	782.52
Real Estate Tax Account,	. 77.91
Repairs of City Property,	3.85
Sewers, General Account,	1,456.79
Sewers, Cedar St., No. 3,	163.82
Temporary Loan,	447,000.00
Unappropriated Funds,	41,416.96 1,097,063.02

AUDITOR'S REPORT.

IN ACCOUNT WITH THE

CITY OF NEW BEDFORD.

CR.

Cemeteries,	\$3,853.56		
Com. of Mass., Chap. 252,	6,122.00		
301,	3,265.50		
Cypress St. Extension,	2,001.60		
Fire Department,	30,490.00		
Free Public Library,	4,787.11		
" "Trustees,	3,905.22		
" Dog Fund,	490.00		
Highways and Streets,	90,256.23		
Improvement of French Avenue,	7,985.13		
Incidentals,	31,399.00		
Laundry at Alnshouse,	2,204.80		
Library Building, Addition to,	16,044.77		
Lighting the Streets,	27,767.90		
N. B. and Fairhaven Bridge,	1,322.98		
N. B. School Committee,	3,383.82		
N. B. Water Works,	77,611.06		
North Cottage St. Extension,	10,600.00		
Police Department,	49,025.23		
Police Station and Lot, Bowditch and Weld Streets, 9,202.80			
Poor Department,	44,650.35		
Public Debt,	$105,\!478.50$		
Public Schools, Incidentals,	22,273.26		
" Pay of Teachers,	75,902.24		
" Repairs of Buildings,	5,206.86		
" Dog Fund,	400.00		
" Thompson St. Furnishings,	1,124.88		
Real Estate, No. 230 Gedar St.,	983.12		
Real Estate Tax Account,	83.81		
Repairs of City Property,	4,638.37		
Salaries,	13,540.00		
Sewers, General Account,	12,260.16		
" Austin Street, No. 1,	1,284.64		
16 No. 2,	446.76		

\$1,116,967.00

Sewers,	Blackmer Street,	\$216.99	
66	Cedar Street, No. 3,	648.43	
6.6	County Street,	464.41	
66	Division Street,	1,681.01	
44	Hawthorn Street, No. 2,	1,555.09	
44	Lindsey Street,	30.51	
44	Robeson Street, No. 2,	779.53	
6.6	Rockland Street and Connections,	33,079.05	
4.6	South Second Street,	210.18	
44	Union Street,	334.82	
Sinking	Funds,	10,000.00	
Tempor	ary Loan,	392,000.00	
Truant	School,	1,924.70	\$1,112,916.38
Balance	, Cash in Treasury,		4,050.62
" " " " " Sinking Tempor Truant	Robeson Street, No. 2, Rockland Street and Connections, South Second Street, Union Street, Funds, ary Loan, School,	779.53 33,079.05 210.18 334.82 10,000.00 392,000.00	

RECEIPTS AND EXPENDITURES IN DETAIL.

SALARIES.

DR.

Morgan Rotch, Mayor,	\$1,500.00	
James H. Hathaway, Treasurer and Collector,	2,400.00	
Daniel B. Leonard, City Clerk,	1,000.00	
William B. Topham, City Auditor,	1,000.00	
Lemuel LeB. Holmes, City Solicitor,	500.00	
Jirch C. Sherman, Sealer of Weights and Measures	, 365.00	
David B. Willeox, Chairman of Assessors,	850.00	
Charles D. Tuell, Assessor,	600.00	
William A. Russell, Assessor,	600.00	
William A. Mackie, Clerk of Common Council,	200.00	
Augustus D. Piper, City Messenger,	600.00	
Isaac Barnes, Bell Ringer,	125.00	
Clifford Baylies, Superintendent City Clock,	75.00	
Henry L. Pitman, Harbor Master,	125.00	
Samuel H. Damon, Inspector Milk and Provis	-	
ions,	600.00	\$10,540.00
BOARD OF HEALTH:		
James D. Thompson,	\$300.00	
Robert W. Taber,	300.00	
Dr. William N. Swift,	300.00	900.00
•		
Board of Registrars:		
Dana B. Humphrey,	\$133.33	
Humphrey A. Gifford, Jr.,	400.00	
Thomas F. Desmond,	400.00	
Emanuel Sullavou,	266.67	
Daniel B. Leonard,	300.00	1,500.00
Amount carried forward,		\$12,940.00

CR.

\$13,540.00

CITY DOCUMENT No. 8.

8

By appropriation,

\$486,300.00

APPROPRIATIONS, GENERAL, 1886.

DR.

	000 00
Commonwealth of Massachusetts, Chap. 252, 3,	00.00
Discount for prompt payment of taxes, 10,	00.000
Fire Department, 28.	,000.00
Free Public Library, 5.	,000.00
Highways and Streets, 75,	000.00
Incidentals, 17,	034.00
Lighting the Streets, 30.	,000.00
N. B. and Fairhaven Bridge,	,000.000,
N. B. Water Works,	000.00
Police Department, 40.	,000.00
Poor Department, 30.	,000.00
Public Debt, 104.	,626.00
Public Schools, Incidentals, 20,	,000.000,
" Pay of Teachers, 72	,000.00
" Repairs of Buildings, 5.	,200.00
Repairs of City Property, 3.	,500.00
Salaries, 13.	,540.00
Sewers, General Account, 2	,400.00
Sinking Fund, 10.	,000.00
Truant School, 2.	,500.00 \$486,300.00

CR.

By Discount Appropriation,	\$10,000.00
Collector of Taxes, 1886,	399,267.86 \$409,267.86
1887, Jan. 5. By balance,	77,032.14

DR.

1887, Jan. 5. To balance, \$77,032.14

APPROPRIATIONS, GENERAL, 1885.

DR.

1886, Jan. 5. To balance, \$43,827.06

CR.

By Collector of Taxes, 1885, \$7,175.79
1887, Jan. 5. By balance, 36,651.27 \$43,827.06

DR.

1887, Jan. 5. To balance,

\$36,651.27

APPROPRIATIONS, GENERAL, 1884.

DR.

CR.

By Collector of Taxes, 1882,

" " 1883,
" " 1884,
" " 1884,
Ships in foreign trade,

681.77 \$2,205.17

APPROPRIATIONS, SPECIAL, 1886.

DR.

To Cemet	eries,	\$1,000.00	
Cypres	s Street Extension,	601.60	
Improv	vement of French Avenue,	8,000.00	
Incide	itals,	11,921.02	
Librar	y Building, Addition to,	8,500.00	
North	Cottage Street Extension,	12,000.00	
Police	Station and Lot, Bowditch and Weld S	ts., 14,000.00	
Repair	s of City Property,	266.80	
Sewers	, General account,	6,366.46	
66	Austin Street, No. 1,	758.68	
66	" No. 2,	972.72	
66	Blackmer Street,	216.99	
66	Cedar Street, No. 3,	648.43	
46	County Street,	400.00	
66	Division Street,	761.51	
"	Hawthorn Street, No. 2,	1,555.09	
66	Lindsey Street,	30.51	
66	Robeson Street, No. 2,	779.53	
	Rockland Street and Connections,	32,689.09	
66	South Second Street,	210.18	
66	Union Street,	334.82	\$102,013.43

CR.

By sale of Sewer Bonds,	\$30,000.00	
Transfer from Unappropriated Funds.	16,589.24 \$46,589.24	
1887, Jan. 5. By balance,	55,424.19	\$102,013.43

DR.

1887, Jan. 5.	To balance,	\$55,424.19

APPROPRIATIONS, SPECIAL, 1885.

DR.

1886, Jan. 5. To balance,

\$57,055.59

CR.

 $\begin{array}{ccc} \text{By sale of Sewer Bonds,} & \$30,000.00 \\ \text{Sale of Improvement Bonds,} & 25,000.00 \\ \text{Transfer from Unappropriated Funds,} & 2,055.59 & \$57,055.59 \end{array}$

COMMONWEALTH OF MASSACHUSETTS.

CHAPTER 252.

DR.

1886, Jan. 5. To balance, \$6,126.25 Amount paid by city for State aid, 6,122.00 \$12,248.25

CR.

By appropriation, \$3,000.00
State Treasurer for 1884, \$3,377.00
" 1885, 3,068.25 6,445.25
Amounts uncalled for, 78.50

\$9,523.75

1887, Jan. 5. By balance, 2,724.50 \$12,248.25

DR.

1887, Jan. 5. To balance, \$2,724.50

COMMONWEALTH OF MASSACHUSETTS.

CHAPTER 301.

DR.

1886, Jan. 5. To balance, \$7,392.65

Amount paid by the city for State

aid.

3,265.50 \$10,658.15

CR.

By State Treasurer, for 1884, 66

1885.

\$3,924.83

3,335.17 \$7,260.00

Amounts uncalled for,

56.00

1887, Jan. 5. By balance,

\$7,316.00

3,342.15 \$10,658.15

DR.

1887, Jan. 5. To balance,

\$3,342.15

COMMONWEALTH OF MASSACHUSETTS. BANK TAX ACCOUNT.

DR.

1887, Jan. 5. To balance,

\$50,879.95

CR.

1886, Jan. 5. By balance,

\$39,756.00

Merchants National Bank Tax, 11,123.95

\$50,879.95

CR.

1887, Jan. 5. By balance,

\$50,879.95

14 CITY DOCUMENT No. 8. February,

DISCOUNT FOR PROMPT PAYMENT OF TAXES.

DR.

To Transfer to Appropriations, General, 1886,

\$10,000.00

CR.

By appropriation,

\$10,000.00

NEW BEDFORD WATER WORKS (AS PUBLIC PROPERTY).

DR.

1886, Jan. 5. To Valuation of Works, Increase in valuation, \$1,000,000.00

200,000.00 \$1,200,000.00

CR.

1887, Jan. 5. By balance,

\$1,200,000.00

DR.

1887, Jan. 5. To balance,

\$1,200,000.00

BALANCE OF PUBLIC PROPERTY.

DR.

To bonds issued, 1887, Jan. 5. To balance, \$85,000.00

885,062.13 \$970,062.13

CR.

1886, Jan. 5. By balance, Bonds paid, \$679,400.00

35,000.00

Commissioners of Sinking Funds, 17,162.13 Increase in valuation,

238,500.00 \$970,062.13

CR.

1887, Jan. 5. By balance,

\$885,062.13

BONDS.

DR.

To bonds paid, 1887, Jan. 5. To balance, \$35,000.00

1,178,000.00 \$1,213,000.00

CR.

1886, Jan. 5. To balance, Bonds issued, \$1,128,000.00

85,000.00 \$1,213,000.00

CR.

1887, Jan. 5. By balance,

\$1,178,000.00

PUBLIC PROPERTY (OTHER THAN WATER WORKS).

DR.

1886, Jan. 5. To balance,

\$907,400.00

Excess of valuation over 1885, 38,500.00 \$945,900.00

CR.

1887, Jan. 5. By balance,

\$945,900.00

DR.

1887, Jan. 5. To balance,

\$945,900.00

SINKING FUND COMMISSIONERS.

CR.

1887, Jan. 5. By funds in hands of Commissioners,

\$17,162.13

SINKING FUNDS.

DR.

To paid Sinking Fund Commissioners,

\$10,000.00

CR.

By appropriation,

\$10,000.00

FIRE DEPARTMENT.

DR.

PAY-ROLLS:		
Permanent men,	\$11,363.98	
Engine companies,	6,037.02	
Board of Engineers,	1,520.00	
Protecting Society,	150,00	\$19,071.00
REPAIRS ON ENGINE, HARNESSES, &c.:		
Berry, Charles F.,	\$6.00	
Brownell, Ashley & Co.,	69.00	
Brownell, Geo. L.,	70.69	
Cronin, William,	65.97	
Cushing, C. F.,	25.10	
Durfee Bros.,	2.84	
Durfee, E. M.,	25.89	
Forbes, J. R. & Co.,	281.50	
Fichtenmayer & Flynn,	72.14	
Gifford Brass Foundry,	23.01	
Healey, T. F.,	17.10	
Hathaway, L. J.,	10.20	
Lowell, Clarence,	74.35	
Maey, E B.,	51.56	
Manchester Loco. Works,	1,025.60	
N. B. Boiler & Machine Co.	21.67	
Willis, W. H.,	63.84	1,906.46
REPAIRS ON ENGINE-HOUSES:		
Crocher, Thomas,	\$1.25	
Gardner & Southwick,	3.94	
Gifford, T. J. & Co.,	8.71	
Hammond, F. W.,	72.67	
Hart & Akin,	55.96	
Moraity Bros.,	62,53	
Snow & Gilbert,	46.42	
Taber, R. A. & Co.,	60.50	
Underwood, C. H.,	121.58	433.56
HAY, GRAIN AND FUEL:		
Allen, Mrs. F.,	\$73.92	
Baylies, William,	297.95	
Amount carried forward,		\$21,411.02

Amount carried forward,

Amount brought forward,		\$21,411.02
Bennett, Asa,	19.96	
Brownell, J. T.,	83.86	
Chase, E. C.,	12.20	
Corson, T. S.,	439.28	
Davis, J. R.,	38.34	
Denison Bros.,	419.25	
Douglass, M. S.,	3.27	
Duff, David & Son,	26.59	
Hammond, C. B.,	25.15	
Hart & Akin,	62.42	
Heron, J.,	38.51	
Kirk, John,	153.65	
Mackenzie & Winslow,	212.73	
Macomber Bros.,	53.91	
Mason, Reuben,	32.11	
P. & R. Coal & Iron Co.,	57.90	
Peirce, F. S.,	87.65	
Poor Department,	366.30	
Potter, D. H.,	233.08	
Shurtleff, J. R.,	32.39	
Smith, John,	2.50	
Wilson, W. P.,	31.52	
Witherell, O. D.,	16.20	2,820.64
SUPPLIES:		
Acushnet Iron Co., grates,	\$17.38	
Bennett, Samuel, tank,	3.00	
Berry, Chas. E., hames,	20.00	
Bliss & Nye, curtains,	7.00	
Boyd, Alexander, hose,	255.00	
Briggs & Lawrence, chairs, &c.,	73.62	
Coggeshall, Maxfield & Co., pipe, &c.,	14.49	
Concord Manufacturing Co., globes,	3.25	
Cummings, C. S. & B., oil,	5.90	
DeWolf & Vincent, polish, &c.,	17.62	
Dews, Edwin, stamp ribbon,	.75	
Dodge, Haley & Co., drills,	11.00	
Donaghy, Thomas, hose,	1.32	
Driseol, Church & Hall, soda, &c.,	9.18	
Gardner & Southwick, pipe, &c.,	35.46	
Gifford, T. J. & Co., pipe, &c.,	194.12	
Grinnell Manufacturing Co., waste,	28.53	

\$24,231.66

Amount brought forward,		\$24,231.66
Greene & Wood, lumber,	25.78	
Hadley, F. R., liniment,	.75	
Hammond, F. W., lumber,	26.79	
Hart & Akin, glass,	2.63	
Homer, George S., oil,	10.00	
Jackson, A. S., dusters,	33.00	
Jenney, W. A., carrots,	13.34	
Lawton, C. H. & H. A., alcohol,	3.10	
Lewis, William, paints, &c.,	78.87	
Lowe, S. C., iron, &c.,	8.50	
Macy, E. B., iron work,	3.05	
Morse, A. J. & Sons, couplings, &c.,	21.00	
N. B. Boiler & Machine Co., water glasses,	4.35	
Richards, George D., water tanks and dusters,	30.49	
Rogers, Edwin, wire,	17.60	
Russell, Pardon, Jr., ice,	13.20	
Sherman, C. R. & Son, wire, &c.,	1.07	
Snow & Gilbert, turpentine,	1.44	
Sullings, Kingman & Co., polish, &c.,	47.10	
Taylor, H. J., mats,	2.42	
Taber, R. H., lanterns, &c.,	57.15	
Tripp, S. A., pipe, &c.,	36.93	
Vitæ Lotion Co.,	6.00	
Ward, M. J., hose,	850.65	
West, W. R., bordering,	4.05	
Wing, C. F., carpet,	24.38	
Witherbee & Co., ointment,	7.00	
Whiting, E. B. & Co., cotton, &c.,	21.10	
Wood, Brightman & Co., pipe, &c.,	2.10	2,051.46
MISCELLANEOUS:		
Allen, George, labor,	\$24.00	
Almy & Hitch, sundries,	7.80	
Anthony, E. & Sons, printing,	48.50	
Bailey, Frank T., labor,	16.15	
Bennett, R. G., making over mattress,	19.80	
Bly, Charles L., labor,	5.00	
Briggs, D. D., expenses, &c.,	58.58	
Brownell, Ashley & Co., horse shoeing,	77.55	
Brownell, Joseph, heirs of, rent,	85.00	
Brownell, H. M., carriage hire,	4.00	
Burt, Dr. W. L., professional services,	11.50	

Amount brought forward,		\$26,283.12
Caswell, N. H., horse shoeing,	50.30	
Cobb, George A., earting, &c.,	6.02	
Coggeshall, Maxfield & Co., labor,	1.00	
Corson, T. S., horse,	200.00	
Cranston, O. W., repairing flag,	4.55	
Dews, Edwin, newspapers, &c.,	22.00	
Douglass, J. O., horses,	700.00	
Dunlap, A. A., professional services,	94.50	
Durfee Bros., labor,	21.17	
Durfee, E. M., horse shoeing,	121.45	
Duff, David & Son, use of horse,	10.50	
Dwelly, Andrew, hacking,	6.00	
Edison Electric Illuminating Co.,	156.89	
Fichtenmayer & Flynn, horse shoeing,	9.75	
Forbes, J. R. & Co., painting wagon, &c.,	64.10	
Fuller, N. T., horse shoeing,	17.25	
Gifford, John P., labor,	14.00	
Gifford, Squire A., labor,	58.00	
Gray, C. A., earting,	6.01	
Greene, F. A. C., labor,	29.00	
Groves, Benjamin, labor,	40.00	
Hadley, F. R., medicine,	16.65	
Kelley, C. S., expenses,	15.00	
King, W. H., labor,	21.00	
Lawton, C. H. & H. A., medicine,	2.43	
Lawton, W. J., carrots,	46.97	
Macy, Frederick, expenses,	121.65	
Macy, Frederick, expenses, Macy, Frederick, use of horse and wagon,	300.00	
Macy, George I., sundries,	23.05	
Manchester, F. A., ice,	8.50	
Mitchell, S. H., labor,	63.25	
Mercury Publishing Co., papers,	12.00	
N. B. Gas Light Co.,	502.67	
Old Colony Railroad Co., freight and tickets,	91.30	
Perry, S. F. & Son, carriage hire,	8.50	
Pierce, G. W., pasturing horse,	3.00	
Roatch & Leary, horse shoeing,	32.95	
Sheehan, Timothy, labor,	58.00	
Sherman & Purrington, printing,	1.00	
Sherman, C. H., estate, ice,	3.50	
Sherman, W. H., carriage hire,	5.00	
Silvia, John, labor,	6.00	
Smith, W. A., earrots,	10.86	

Amount brought forward,		\$26,283.12
Snow & Gilbert, labor,	9.20	
Southern Mass. Telephone Co.,	350.00	
Street Department, repairing reservoirs, &c.,	353.29	
Swan, W. D. & Son, axe handles,	1.50	
Sylvia, A. J., carrots,	9.25	
Taber, Reuben, labor,	20.00	
Taber, R. A. & Co., labor,	1.60	
Thomas, George, ice,	7.00	
Tripp, C. H., horse shoeing,	17.10	
Tripp, George A., labor,	14.00	
Welles, Dr. H. B., fixing horses' teeth,	34.00	
West, W. R., labor,	5.29	
Wilbur, G. W., labor,	11.00	
Wood, Charles H., labor,	30.00	4,206.88
		\$30,490.00

CR.

By appropriation,	\$28,000.00	
Transfer from unappropriated funds,	2,150.76	\$30,150.76
Poor Department,	\$245.99	
N. B. Water Works,	15.10	261.09
Sale of coal,	\$20.35	
Concord Manufacturing Co., amount returned.	3.25	
C. F. Cushing,	4.55	28.15
Pumping,		50.00
		\$30,490.00

FREE PUBLIC LIBRARY.

DR.

\$2,000.00 925.00 525.00 489.00 500.00	
925.00 525.00 489.00	
925.00 525.00 489.00	
489.00	
500.00	
23.00	\$4,462.00
\$3.00	
12.00	
36.50	
25.00	
139.75	
48.15	
3.25	
53.96	
3.50	325.11
	\$4,787.11
	212.89
	\$5,000.00
	\$ 5
	\$5,000.00
	\$3.00 12.00 36.50 25.00 139.75 48.15 3.25 53.96

FREE PUBLIC LIBRARY—TRUSTEES. (INCOME DERIVED FROM TRUST FUNDS.)

DR.

BOOKS, PERIODICALS, NEWSPAPERS, BINDING, &C.:

ooks, I mitobleaks, MEWSIAI ERS, DINDING	,
Academy of Natural Sciences,	\$5.00
Allyn, John,	113.59
American Chemical Journal,	3.00
American Journal of Philology,	3.00
Appleton, D. & Co.,	64.80
Arber, Edward,	60.00
Baptist Review Association,	2.50
Bouton, J. W., agent,	14.40
Bowen, George, agent,	5.50
Bowker, R. R.,	3.00
Carter, Rice & Co.,	16.50
Cassino, S. E. & Co.,	6.00
Clarke, Robert & Co.,	7.75
Co-operative Newspaper Society,	3.65
Cupples, Upham & Co.,	4.00
Dawson, H. B.,	6.00
Dews, Edwin,	261.10
Dufosse, E.,	104.00
Ellis, George H.,	2.00
Essex Institute,	3.00
Estes & Lauriat,	5.00
Fluscher, Carl F.,	9.70
Fords, Howard & Hulbert,	12.50
Francis, David G.,	65.80
Ginn & Co.,	3.00
Harper, F. P.,	11.34
Hathaway, J. H., Treasurer,	130.60
Harvard Monthly,	4.00
Hickox, J. H.,	2.00
Houghton, Mifflin & Co.,	7.00
Howland, Franklyn,	9.00
Hutchinson, S.,	577.10
Index, Q. P.,	5.50
Inman, H. S., agent,	60.00
Johns Hopkins University,	6.40
Kane, D. J. & Bro.,	63.10
Lawton, J. M., Jr.,	528.09
Lea, J. Henry,	1.97
Lewis, J. W. & Co.,	16.00
Library Bureau,	3.50
Little, Brown & Co.,	580.36

Littlefield, George E.,	163.59	
Luzerne Legal Register,	7.75	
Maine Hist. & Genl. Recorder,	3.00	
Mass. Historical Society,	5,50	
McDonough, Joseph,	14.00	
Mercury Publishing Co.,	6.00	
Morgan, H. J.,	2.50	
Morse, George D.,	21.30	
Munsell, Joel's Sons,	30.11	
Nash & Pierce,	34.02	
Narragansett Historical Pub. Co.,	2.00	
Newport Historical Pub. Co.,	2.00	
Noyes, Henry D. & Co.,	22.05	
Osgood, E. L., manager,	13.50	
Parsons, John D., Jr.,	18.00	
Polk, R. L. & Co.,	5.00	
Rau, J. W., agent,	6.00	
Raymond, E. P.,	3.00	
Roffe, A. H. & Co.,	203.30	
Sampson, Murdock & Co.,	14.00	
Schoenhof, Carl,	202,32	
Scribner, Charles' Sons,	5.00	
Scribner & Welford,	2.31	
Stockbridge, J. C.,	5.75	
Studies in Historical and Pol. Sciences,	3.00	
Thompson, W. H. & Co.,	36.00	
Treat, E. B.,	25.00	
Tryon, George W., Jr.,	40.00	
U. S. Patent Office,	46.80	
Weigel, T. O.,	48.72	
Wilson, E. L.,	12.00	
Woodward, C. L.,	103.15	
Zahm, S. H.,	7.80	\$2.00° aa
1887, Jan. 5. To balance,	1.80	\$3,905.22
1007, Jan. 9. To Datance,		12,191.97
		\$16,097.19
C _R .		
1886, Jan. 5. By balance,	\$12,846.83	
Income from Trust Funds,	3,246.00	
Amount returned,	4.36	¢10 007 10
Amount returned,	4.00	\$16,097.19
Cr.		
1887, Jan. 5. By balance,		\$12,191.97

FREE PUBLIC LIBRARY—DOG FUND.

Dr.		
Ames, Yorick W., janitor, 1887, Jan. 5. To balance,	\$490.00 602.74	\$1,092.74 ————
CR.	\$310.22	
Amount received from County Treasurer,	782.52	\$1,092.74
Cr. 1887, Jan. 5. By balance,		\$602.74

CEMETERIES.

DR.

Allen, Clark, stone,	\$6.25	
Anthony, E. & Sons, advertising,	3.62	
Brown, W. S., care of flowers, &c.,	100.00	
Brownell, C. W., superintendent,	200.00	
Cornell, C. F., labor,	673.90	
Davis, Otis A., labor,	2,235.72	
DeWolf & Vincent, hardware,	4.60	
Dews, Edwin, stationery,	1.72	
Drake, A. B., surveying,	114.00	
Faunce, L. H., carpentry,	16.06	
Grinnell, A. B., labor,	8.00	
Holmes, D. W., masonry,	11.29	
Howard, W. M., care of flowers, &c.,	100.00	
H. V. Davis Chemical Works, phosphate,	17.00	
Mercury Pub. Co., advertising,	3.75	
N. B. Cordage Co., rope,	3.81	
Perry, S. F. & Son, carriage hire,	2.00	
Poole, R. D., labor,	15.00	
Sewers, General Account, drain,	50.00	
Snow & Gilbert, painting, .	47.28	
So. Mass. Telephone Co.,	78.00	
Street Department, labor,	2.50	
Sullings, Kingman & Co., hardware,	4.60	
Sylvia, A. A., sharpening tools, &c.,	96.76	
White, Phineas, pumps, &c.,	53.20	
Wood, E. B. & Son, carriage hire,	4.50	\$3,853.56
1887, Jan. 5. To balance,	T**///	77.11
		\$3,930.67
C _R .		
CR.		
1886, Jan. 5. By balance,		\$65.67
Appropriations, General,	\$500.00	
"Special,	1,000.00	
Receipts from sales of lots,	2,365,00	3,865.00
		\$3,930.67
CR.		
1887, Jan. 5. By balance,		\$77.11

HIGHWAYS AND STREETS.

DR.

PAY-ROLLS:

Labor and teams,	\$55,817.5)
FLAGGING AND STONE:		
Addy, William,	\$1.90	
Allen, Clark,	527.45	
Ashley, Thomas,	4.50	
Barrows, J. W.,	. 137.49	
Bertram, John & Co.,	14.99	
Borden, Geo. B.,	150.73	
Brownell, H. M.,	1,678.94	
Brownson, L. B.,	3.90	
Burgess, J. M.,	34.50	
Burke, Chas.,	59.50	
Butts, C. H. W.,	8.70	
Calnan, Timo.,	30.60	
Casey, E. H.,	60.12	
Coggeshall, C. F.,	37.39	
Cook, Philip B.,	55.87	
Cory, George F.,	124.74	
Crapo, George G.,	213.54	
Cunningham, D. P.,	70.01	
Curtis, M. E.,	5.50	
Douglass, J. O.,	82.44	
Duddy, James,	4.00	
Duff, David & Son,	87.18	
Dugan, Michael,	250.33	
Galpin, Clarissa D.,	15.00	
Gammons, S. P.,	3.30	
. Gifford, C. T. W.,	105.80	
Gifford, John W.,	47.78	
Goulet, Julian,	157.33	
Grew, David,	11.96	
Grew, David, Jr.,	120.96	
Gurl, Frank,	.73	
Hathaway, J. W.,	150.58	
Hathaway, Paul E.,	113.06	
Hathaway, Paul S., agent,	132.23	
Hathaway, Rodman,	430.17	
Kenney, E. D.,	1.31	

Amount earried forward,

\$55,817.59

Amount brought forward,		\$55,817.59
King, W. H.,	22.52	
Kingsley, Nelson,	3.49	
Manchester, J. W.,	43.01	
Paisler, C. S.,	6,567.46	
Pease, W. A.,	34.59	
Perkins & Staples,	2.89	
Pittsley, William,	.84	
Poole, Arthur,	3.00	
Poole, Richard,	19.98	
Potter, Geo. A.,	169.16	
Quirk, Patrick,	4.65	
Reed, Eli,	67.15	
Richards, Julia P.,	5.36	
Ridley, Clark,	15.96	
Ritter, W. O.,	67.23	
Rogers, A.,	32.87	
Rogers, Charles,	1.50	
Rogers, Joseph H.,	80.71	
Russell, Pardon, Jr.,	27.50	
Sheehan, Timothy,	148.73	
Snell, Thomas,	15.50	
Spooner, Chas. F.,	95.41	
Spooner, J. W.,	74.92	
Sutton, W. J.,	544.65	
Sweeney, Daniel,	83.67	
Taber, George B.,	183.68	
Terry, Killey E.,	179.75	
Tripp, Peleg,	36.11	
Wainer, D. F.,	6.70	
Weaver, W. H.,	53.00	
Williston, Alanson,	5.40	
Wordell, Silas,	2.49	13,534.41
REPAIRS OF WAGONS AND HARNESS:		
Bennett, Geo. W. & Bro.,	\$8.92	
Brownell, Ashley & Co.,	259.20	
Brownell, George L.,	47.40	
Caswell, N. H.,	77.02	
Caswell, O. F.,	20.95	
Cronin, William,	148.22	
Cushing, C. F.,	204.84	
Dexter, T. D.,	2.00	
Durfee, E. M.,	155.21	

\$69,352.00

Amount earried forward,

\$72,351.97

Amount brought forward,		\$69,352.00
Fichtenmayer & Flynn,	58.60	
Forbes, J. R. & Co.,	621.38	
Hathaway, L. J.,	8.00	
Healey, T. F.,	52.90	
Luce, F. C.,	381.45	
Ritter, W. O.,	16.87	
Russell, Pardon, Jr.,	327.88	
Sawyer, S. P.,	4.40	
Weaver, S. V.,	18.90	
Wood, J. Aug.,	7.80	2,421.94
SHARPENING AND REPAIRING TOOLS:		
Ashley & Boyle,	\$4.07	
Bennett, Geo. W. & Bro.,	19.15	
Durfee Bros.,	.66	
Durfee, E. M.,	28.16	
Fichtenmayer & Flynn,	10.49	
Footman, J. W.,	151.96	
Fuller, N. T.,	.25	
King, W. H.,	64.81	
Lowell, Clarence,	1.00	
Roatch & Leary,	46.13	
Sherman, W. D.,	13.19	
Skiff, S. B.,	195.53	
Sylvia, A. A.,	23,43	
Taber, Charles G.,	2.09	
Terry, F. C.,	7.33	
Tripp, H. A.,	9.78	578.03
HAY, GRAIN AND FUEL:		
Alden, Seth,	\$113.58	
Blossom, Edwin,	207.06	
Brawley, L. W.,	59.55	
Brownell, David,	14.33	
Coleman, E. M.,	55.46	
Corson, T. S.,	514.73	
Crapo's steam mill,	22.30	
Denison Bros.,	1,523.37	
Gosnold Mills,	27.31	
Greene, N. H., Jr.,	83.50	
Hathaway, B. F.,	89.68	
Kirk, John,	459.00	

Amount brought forward,		\$72,351.97
Lawrence, Joseph,	88.88	
Little, E. A.,	248.89	
Mackenzie & Winslow,	191.14	
N. B. Gas Light Co	41.74	
Pierce, J. H.,	4.00	
Poor Department,	130.15	
Potter, D. H.,	24.64	
Sisson, O. A.,	127.13	
Slocum, J. O.,	48.23	
Smith, James F.,	28.88	
Spooner, Thomas,	24.15	
Studley, S. E.,	68.26	
Wright, J. M.,	16.54	4,212.50
GRAVEL AND SAND:		
Allen, Sarah,	\$11.52	
Brownell, H. M.,	43.90	
Coggeshall, C. F.,	1,578.97	
Cunningham, D. P.,	8.90	
Demoranville, Walter,	10.26	
Dugan, Michael,	60.56	
Hammond, John,	6.00	
Luscomb, Leonard,	22.38	
Parker, Lucy N.,	82.04	
Poole, Arthur,	77.64	
Spooner, John,	10.02	1,912.19
Horseshoeing:		
Caswell, N. H.,	\$.75	
Caswell, O. F	7.50	
Durfee, E. M.,	45.15	
Fichtenmayer & Flynn,	84.20	
Footman, J. W.,	25.55	
Forbes, J. R.,	124.86	
Fuller, N. T.,	83.90	
Luce, J. L.,	42.11	
Roatch & Leary,	57.88	
Sylvia, A. A.,	9.24	
Taber, C. G.,	6,00	
Tripp, C. H.,	40.73	527.87
Amount carried forward,		\$79,004.53

Amount brought forward,		\$79,004.53
REPAIRS OF ROLLER AND CRUSHER:		
Almy & Hitch,	\$10.00	
Ashley & Boyle,	.80	
Babbitt, Wood & Co.,	145.60	
Bowker & Tripp,	473.12	
Farrell Foundry & Machine Co.,	137.39	
Fichtenmayer & Flynn,	6.00	
Gifford's Brass Foundry,	4.36	
Gifford, T. J. & Co.,	86.09	
Hayes, N. P.,	7.17	
Lucas, A. E.,	105.30	
Luce, F. C.,	9.30	
N. B. Boiler & Machine Co.,	46.32	
Skiff, S. B.,	8.58	
Weaver, S. V.,	25.50	
White, Phineas,	.91	1,066.44
SUPPLIES AND MATERIALS:		
Alley, A. G., Jr., pails,	8 .45	
American Spiced Food Co.,	35.00	
American Tack Co., nails,	1.26	
Babbitt, Wood & Co., grease,	6.07	
Bennett, R. G., chairs,	11.24	
Brownell & Co., paint,	5,35	
Butman, W. T.,	10.00	
Caswell, W. H., lead,	10.67	
Cobb, Geo. A., dirt and labor,	8.60	
Coffin, H. B., oil,	8.75	
Coggeshall, C. W., blocks, &c.,	12.36	
Delano, George's Sons, oil,	57.50	
DeWolf & Vincent, shovels, &c.,	112.60	
Dews, Edwin, books, &c.,	2.40	
Donaghy, Thomas, belts and lacings,	5.12	
Driseol, Church & Hall, oil, &c.,	23.85	
Farnham, H. C., tool box,	1.50	
Farrell Foundry & Machine Co., plates,	31.84	
Gardner & Southwick, castings,	,50	
Gifford, J. A., carrots,	61.62	
Gifford, T. J. & Co., nipple,	2.30	
Gósnold Mills Co., chain,	3.42	
Greene & Wood, lumber,	61.67	
Greene, N. H., Jr., shovels,	2.05	
Amount earried forward,		\$80,070.97

Amount brought forward,		\$80,070.97
Hamlin, J. B., rolls,	9.00	
Hamlin, S. B., pounder,	27.45	
Hart, T. M., twine,	3.20	
Hawes, Simeon, pole, &c.,	25.30	
Hawes, W. M., jack and belt,	70.00	
Hayes, N. P., nails, &c.,	26.76	
Hersom, T., resin,	1.60	
Hillman, Jethro, lumber, &c.,	173.55	
Jenkins, B. S., paint,	61.83	
Kennedy, M. F., tubs,	11.00	
Lowe, S. C., tools,	295.26	
Lucas, A. E., belt,	2.36	
Miller, W. P. & Co., oil,	5.00	
Moriarty Bros., signs,	2.80	
N. B. Cordage Co., rope,	7.22	
N. B. Water Works, pipe,	83.68	
Old Colony R. R. Co., rails,	27.97	
Paisler, C. S., pipe and cement,	172.26	
Potomska Mills, waste,	13.20	
Purrington & Brown, pitcher, &c.,	1.73	
Russell, Pardon, Jr., plank,	30.60	
Russell, S. H., oil,	2.66	
Sawyer, S. P., brooms, iron, &c.,	13.85	
Scollay & Poor, metal polish,	4.95	
Skiff, S. B., sledge,	12.81	
Sullings, Kingman & Co., shovels,	111.60	
Sylvia, A. A., chain,	7.50	
Tillinghast & Terry, lumber,	127.21	
Vite Lotion Co.,	3.00	
Wakefield Rattan Co., reeds,	13.25	
Washburn, W. H., lumber,	178.97	
West, Simeon,	.32	
West, W. R., paint,	64.82	
Whittemore, M. F., soap,	3.60	
Wood, Brightman & Co., oil feeder,	.33	2,072,76
wood, Brightman & Co., on recuer,	** ** **	2,012.10
MISCELLANEOUS:		
Abbott Downing Co., street sweeper,	\$375.00	
Acushnet Iron Co., castings,	14.95	
Allen, Abram, use of blocks,	3.00	
Allen, A. H., care of lights.	2.58	
American Supply Co., sundries,	1.17	

\$82,143.73

lη	nount brought forward,		\$82,143.73
	Anthony, E. & Sons, advertising,	33.75	
	Ashley, Dr. D. C., veterinarian,	9.25	
	Bancroft, J. V., horse,	275.00	
	Bancroft, J. V., use of dray,	10.00	
	Bertram, John & Co., concreting, &c.,	3,661.61	
	Brightman & Washburn, earpentry,	1.75	
	Brownell, H. M., horse hire,	11.00	
	Burgess, J. M., land rent,	106.00	
	Butts, C. H. W, cleaning vault,	4.00	
	Carr, John, liniment,	2.05	
	Cedar street sewer, No. 3, overcharge,	163.82	
	Cole, T. W., labor,	.40	
	Cook, J. S. & Son, horse hire,	28.00	
	Dews, Edwin, books and stationery,	88.16	
	Donogan, Cornelius, care of lights,	4.20	
	Drake, A. B., surveying,	898.42	
	Duff, David & Son, carrying men,	60.00	
	Dunlap, A. A., veterinarian,	52.50	
	Eggers, S., powder,	18.85	
	Gammons, E. H., cleaning vaults,	24.00	
	Gammons, E. H., pigs,	36.00	
	Gifford, T. J. & Co., repairing pump,	29.85	
	Greene, M. S., care of lights,	2.10	
	Hadley, F. R., medicines,	33.85	
	Hathaway, Eben R., use of buggy,	4.50	
	Hathaway, Horatio, land,	64.92	
	Hillman, Jethro, carpentry,	252.21	
	Holmes, D. W., labor,	29.45	
	Hornblower, W. H., veterinarian,	29.00	
	Jenkins, B. S., labor,	5.45	
	Kane, D. J. & Bro., paper,	12.25	
	Kelley, W. L., repairing clock,	1.25	
	Kempton, estate of F. A., land rent,	250.00	
	Lathrop, Elias, ointment,	8.00	
	Leonard, Dr. M. H., professional services,	3.00	
	McCarthy, Jerry, care of lights,	1.38	
	McCue, John, labor,	17.50	
	McGlynn, John, eare of lights,	5.94	
	McLyster, John, care of lights,	6.30	
	Mercury Pub. Co., advertising,	24.23	
	Morris & Ireland, safe,	165.00	
	Nelson, George, labor,	92.25	
	N. B. Boiler & Machine Co., labor,	48.48	

Amount brought forward,		\$82,143.73
N. B. Gas Light Co.,	107.10	
N. B. Water Works, labor,	.46	
Nickerson, J. W., expenses,	50.00	
Norton, P. H., care of lights,	1.80	
Old Colony Railroad Co., freight,	21.62	
Paine Furniture Co., desk,	66.00	
Parker's Wharf, rent,	100.00	
Perkins & Staples, concreting,	149.50	
Perry, S. F. & Son, horse hire,	3.00	
Poole, Richard, blasting rocks,	5.00	
Renihan, Thomas, care of lights,	6.18	
Russell, P., Jr., ice,	18.00	
Sawyer, S. P., labor,	12.88	
Sherman, J. C., sealing scales,	2.00	
Sisson, O. A., feeding horses,	6.42	
Smith, John, horse,	287.50	
Smith, John J., care of lights,	2.94	
So. Mass. Telephone Co.,	122.09	
Stetson, T. M., land rent,	10.00	
Sullivan, John J., care of lights,	1.20	
Swift, M. C., overcoat,	18.00	
Taber, David H., eare of lights,	4.20	
Taylor, W. J., care of lights,	13.14	
Tower, John, care of lights,	20.10	
Webster, H. G., pigs,	35.00	
Wells, Dr. H. B., veterinary dentist,	46.00	0.440.80
West, W. R., setting glass,	30.00	8,112.50
To transfer to incidentals,	\$283.69	\$90,256.23
" Division Street Sewer,	729.33	1,013.02
Division Street Seller,	12000	
	TO A COLOR OF THE PARTY OF THE	\$91,269.25
Cr.		
By appropriation,		\$75,000.00
Labor, dirt, stone, drains, &c.,		6,845.63
Sale of crusher,	\$150.00	
Sale of hay,	115.09	
Sale of horse,	75.00	
Sale of pork,	173.50	
Sale of engine,	150.00	
Sale of wheels,	15.00	678.59
Other departments, stock, labor, &c.,		8,745.03
		\$91,269.25

\$4,853.57

INCIDENTALS.

Dr.

DR.		
Advertising and Printing:		
Anthony, E. & Sons,	\$2,338.74	
Mercury Pub. Co.,	564.18	
Raymond, E. P.,	108.47	
Robertson, George,	.75	\$3,012.14
Assessors:		
Anthony, E. & Sons, printing, &e.,	\$4.25	
Austin, J. H. C.,	66.00	
Bradley, William E., carriage hire,	8.00	
Brownell, H. M., carriage hire,	15.00	
Dews, Edwin, books and stationery,	61.01	
Galligan, John H., inventories,	6.75	
Mercury Pub. Co., advertising, &c.,	70.31	
Mills, M. T.,	325.25	
Paul, Frank,	98.25	
Rodgers, John D.,	60.75	
Sherman, C. R. & Son, pens,	1.50	
Sherman, W. H., carriage hire,	5.00	
Terry, C. A. V.,	287.25	
Tinkham, Otis,	136.00	
Topham, R. R.,	334.50	
Tuell, C. A.,	175.00	1,654.82
BOARD OF HEALTH:		
Anthony, E. & Sons, advertising and printing,	\$15.71	
Dews, Edwin, stationery,	4.25	
Hadley, F. R., oil peppermint,	3.25	
Jay, James A., carriage hire,	3.25	
Kelley, W. L., repairing clock,	1.25	
Lawton, C. H. & H. A., vaccine points,	7.90	
Macomber, W. E., paid for burial of dogs,	1.25	
Mercury Pub. Co., advertising,	28.75	
Pitman, H. L.,	6.00	
Raymond, E. P., advertising,	2.00	
Swift, Dr. W. N., post-mortems,	113.00	186.61
Damages and Legal Expenses:		
Aiken, Rhoda E.,	\$550.25	
Beetle, R.,	51.56	

Amount brought forward,	•	\$4,853.57
Beetle, R., et al.,	106.97	
Church, H. M.,	15.00	
City Treasurer,	109.60	
Dricous, Margaret N.,	9.12	
Dunham, H. L.,	151.50	
Holmes, L. LeB.,	116.76	
Howland, W. F.,	152.00	
Nye, Heirs of Willard,	185.12	
Pease, Robert W.,	200.00	
Richmond, Geo. B.,	17.60	
Sisson, E. R.,	65.00	
Snell, William,	150.00	
Stetson, T. M.,	300.00	
Sylvia, A. L.,	10.00	
Woodward, W. H.,	225.00	2,415.48

ELECTIONS:

Amount carried forward,

Anthony, E. & Sons, advertising and printing,	\$408.27	
Baylies, Clifford, clerical help,	84.00	
Brownell, H. M., carriage hire,	55.70	
Denham, J. R., rent,	36.00	
DeWolf, Chas., carpentry,	. 14.68	
Dews, Edwin, stationery,	12.55	
Duddy, James, earting,	3.00	
Faunce, Loum H., rent and fuel,	53.45	
Gomley, John Λ ., carting,	18.00	
Hillman, Jethro, earpentry,	7.90	
Jason, A. V., labor,	14.00	
Mason, estate of Humphrey, rent,	12.00	
Mercury Pub. Co., advertising and printing,	386.42	
Notter, John, coal,	1.15	
Piper, A. D., labor,	30.00	
Piper, J. Arthur, labor,	11.00	
Precinct officers,	715.50	
Raymond, E. P., advertising,	130.36	
Robertson, George, advertising,	9.50	
Saxon, George E., rent,	36.00	
Sherman, W. H., carriage hire,	12.00	
Standard Ballot Box Co.,	9.90	
Sullings, Kingman & Co., hardware,	2.45	2,063.83

\$9,332.88

· Amount brought forward,		\$9,332.88
FOURTH OF JULY:		
Andress, Braddock, earting,	\$.50	
Anthony, E. & Sons, advertising,	26.54	
Barnes, Isaac, ringing bell,	3.00	
Briggs & Lawrence, prizes,	44.00	
Brightman, R. G., earting,	11.50	
Brownell, H. M., sundries,	34.75	
Chapman, E. T., eigars,	10.00	
Cranston, J. M., judge at boat race,	3.00	
Cummings, C. S. & B., crackers, &c.,	8.36	
Davis, Charles E., umpire at ball game,	5.00	
Dews, Edwin, paid for prizes,	140.00	
Donovan, M. H., tassels,	1.80	
Ellis, L. B., picture,	22.00	
French-American Band,	200.00	
Geils, Gerett, desk,	26.00	
Hadley, F. R., flag,	.25	
Hawes, William, printing,	5.00	
Hines, H. S., ringing bell,	3.00	
Holway, Thomas, ringing bell,	3.00	
Hyde & Co., fireworks,	450.00	
Jay, James A., carting,	5.00	
Jenney, P. P. & Son, labor on band stands,	33.56	
Kane, D. J. & Bro., printing placard,	.75	
Kelley, W. L., clock,	20.50	
Knight, C. W., invitations,	1.50	
Lawrence, C. E., painting sign,	1.44	
Maxfield, Alex. S., carting,	.75	
McCullough, John, use of rope,	1.10	
Mercury Pub. Co., advertising,	27.45	
New Bedford Band,	200,00	
Nickerson, Geo. Y., labor on awnings,	1.00	
Peirce & Kelley, advertising,	5.00	
Robenalt, E. S., ringing bell,	3.00	
Russell, J. A., base balls,	2.00	
Sherman, J. L. & Co., labor,	12.25	
Street Department, labor on ball grounds,	11.75	
Sullivan, D. J., badges, &c.,	48.65	
Topham, W. B., expenses,	32.10	
Tripp, P. M., earting,	2.00	
Union Cornet Band,	200.00	
Whitehead Bros., hacking,	8.75	
Wood, E. B. & Son, carriage hire,	2.00	1,618.25
Amount earried forward,		\$10,951.13

Amount brought forward,		\$10,951.13
LABOR AND CLEANING:		
Piper, A. D.,	\$101.00	
Piper, J. Arthur,	201.50	
Seals, Harrison J.,	10.00	312.50
Light and Fuel:		
Corson, T. S.,	\$497.74	
Edison Electric Ill. Co.,	317.60	
Hart & Akin,	11.05	
N. B. Electric Light Co.,	277.10	
N. B. Gas Light Co.,	819.30	1,904.79
RETURNS OF BIRTHS AND DEATHS:		
Brownell, Dr. W. E.,	\$9.25	
Fortin, Dr. J. E.,	7.25	
Clarke, Dr. H. B.,	3.75	
Hayes, Dr. S. W.,	63.00	
Hough, Dr. George T.,	18.25	
Howland, Dr. B. C.,	4.50	
Jean, J. B.,	16.75	
Leonard, D. B.,	591.85	
Leonard, Dr. M. H.,	13.75	
Mackie, Dr. J. H.,	2.00	
Murphy, T. J.,	17.00	
Normandin, Dr. L. Z.,	19.75	
Pierce, Dr. A. M.,	15.25	
Richardson, Sarah E.,	1.75	
Swift, Dr. W. N.,	16.75	
Vaughan, W. C., Jr.,	29.75	
Webster, Dr. Helen W.,	23.50	
Williams, J. S.,	14.00	
Wilson, E. T.,	55.75	923.85
Inspector of Milk and Provisions:		
Anthony, E. & Sons, advertising,	\$21.57	
Beals, C. E., glass jars,	5.40	
Brightman & Washburn, earpentry,	13.37	
Brown, John, earriage hire,	4.00	
Brownell, H. M., carriage hire,	150.35	
Brownell & Murkland, carpentry,	8.15	
Coggeshall, Maxfield & Co., plumbing, &c.,	4.44	
Amount earried forward,		\$14,092.27

Amount carried forward,

\$15,202.66

Corson, T. S., coal, Dammon, S. H., care of office, Davenport, Dr. B. C., analyses, S5.95 Dews, Edwin, books and stationery, Educational Supply Co., lactometer, Flagg, Dr. O. H., veterinary services, Hathaway, Nathaniel, analyses, Hillman, Jethro, carpentry, Hornblower, Dr. W. H., inspections, Jay, James A., carriage hire, Salage, Mercury Pub. Co., advertising, N. B. Gas Light Co., Richards, W. D., carriage hire, So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, Salaghies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Baylies, Clifford, repairing clocks, Baylies, Clifford, repairing clocks, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Brownell, H. M., dinners, Brownell, H. M., dinners, Butts, H. R., killing horses, Cook, John S. & Son., carriage hire, Coggeshall, Maxifeld & Co., iron boxes, Cook, John S. & Son., carriage hire, Son.	Amount brought forward,		\$14,092.27
Dammon, S. H., care of office, Davenport, Dr. B. C., analyses, Dews, Edwin, books and stationery, Educational Supply Co., lactometer, Flagg, Dr. O. H., veterinary services, Flagg, Dr. O. H., veterinary services, Flagg, Dr. O. H., veterinary services, Hillman, Jethro, carpentry, Hornblower, Dr. W. H., inspections, Jay, James A., carriage hire, Educy, W. L., badge, Maxfield, William & Son, painting, Mercury Pub. Co., advertising, Description, N. B. Gas Light Co., Richards, W. D., carriage hire, Russell, Pardon, ice, So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, MISCELLANEOUS: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Axmory rent, Assessors, making out tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, H. M., carriage hire, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Chase, J. H., carting, Coggeshall, Maxfield & Co., iron boxes,	Corson, T. S., coal,	20.75	,
Davenport, Dr. B. C., analyses, Dews, Edwin, books and stationery, Educational Supply Co., lactometer, Flagg, Dr. O. H., veterinary services, Flagg, Dr. O. H., veterinary services, Hillman, Jethro, carpentry, Hornblower, Dr. W. H., inspections, Jay, James A., carriage hire, Edeley, W. L., badge, Maxfield, William & Son, painting, Mercury Pub. Co., advertising, Mercury Pub. Co., advertising, Mercury Pub. Co., advertising, Mersell, Pardon, ice, So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, MISCELLANEOUS: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bilss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Bordon, A. F., carriage hire, Boston Daily Advertiser, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Borton, Alert, delivering tax bills, Chapman, E. T., cigars, Cannon, Albert, delivering tax bills, Coggeshall, Maxfield & Co., iron boxes, 30.75			
Dews, Edwin, books and stationery,		85.95	
Flagg, Dr. O. H., veterinary services, Hathaway, Nathaniel, analyses, Hillman, Jethro, carpentry, Hornblower, Dr. W. H., inspections, Jay, James A., carriage hire, Kelley, W. L., badge, Maxfield, William & Son, painting, Mercury Pub. Co., advertising, D. B. Gas Light Co., Richards, W. D., carriage hire, Russell, Pardon, ice, So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, MISCELLANEOUS: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Borden, A. F., carriage hire, Boston Daily Advertiser, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Brownell, H. M., dinners, Brownell, H. M., dinners, Brownell, H. M., dinners, Cargeshall, Maxfield & Co., iron boxes, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., eigars, Cargeshall, Maxfield & Co., iron boxes, Cargeshall, Maxfield & Co., iron boxe		101.94	
Hathaway, Nathaniel, analyses, Hillman, Jethro, carpentry, Hornblower, Dr. W. H., inspections, Jay, James A., carriage hire, Kelley, W. L., badge, Maxfield, William & Son, painting, Mercury Pub. Co., advertising, N. B. Gas Light Co., Richards, W. D., carriage hire, Russell, Pardon, ice, So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, MISCELLANEOUS: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Brown, John, use of wagon, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Coggeshall, Maxfield & Co., iron boxes, 30.75		1.28	
Hillman, Jethro, carpentry, 16.73 Hornblower, Dr. W. H., inspections, 191.00 Jay, James A., carriage hire, 23.50 Kelley, W. L., badge, 1.50 Maxfield, William & Son, painting, 6.23 Mercury Pub. Co., advertising, 20.99 N. B. Gas Light Co., 6.14 Richards, W. D., carriage hire, 118.00 Russell, Pardon, ice, 11.00 So. Massachusetts Telephone Co., 35.00 Waite, B. H., rent of office, 138.75 Whiting, E. B. & Co., towels, 4.85 MISCELLANEOUS: Armory, heating apparatus, 524.23 Armory rent, 750.00 Assessors, making out tax-bills, 75.00 Austin, J. H. C., delivering tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	Flagg, Dr. O. H., veterinary services,	2.00	
Hornblower, Dr. W. H., inspections, Jay, James A., carriage hire, Z3.50 Kelley, W. L., badge, Maxtield, William & Son, painting, Mercury Pub. Co., advertising, D., 20.99 N. B. Gas Light Co., Richards, W. D., carriage hire, Rischards, W. D., carriage hire, Russell, Pardon, ice, So. Massachusetts Telephone Co., So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, MISCELLANEOUS: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, H. M., carriage hire, Brownell, H. M., carriage hire, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Chapman, E. T., cigars, Chapman, E. T., cigars, Chase, J. H., carting, Coggeshall, Maxfield & Co., iron boxes, 30.75	Hathaway, Nathaniel, analyses,	13.50	
Jay, James A., carriage hire,	Hillman, Jethro, carpentry,	16.73	
Kelley, W. L., badge, 1.50 Maxfield, William & Son, painting, 6.23 Mercury Pub. Co., advertising, 20.99 N. B. Gas Light Co., 6.14 Richards, W. D., carriage hire, 118.00 Russell, Pardon, ice, 11.00 So. Massachusetts Telephone Co., 35.00 Waite, B. H., rent of office, 138.75 Whiting, E. B. & Co., towels, 4.85 1,110.39 MISCELLANEOUS: Armory heating apparatus, \$24.23 Armory rent, 75.00 Assessors, making out tax-bills, 75.00 Assessors, making out tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, A		191.00	
Maxfield, William & Son, painting, 6.23 Mercury Pub. Co., advertising, 20.99 N. B. Gas Light Co., 6.14 Richards, W. D., carriage hire, 118.00 Russell, Pardon, ice, 11.00 So. Massachusetts Telephone Co., 35.00 Waite, B. H., rent of office, 138.75 Whiting, E. B. & Co., towels, 4.85 1,110.39 MISCELLANEOUS: Armory, heating apparatus, \$24.23 Armory rent, 750.00 Assessors, making out tax-bills, 75.00 Austin, J. H. C., delivering tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00		23.50	
Mercury Pub. Co., advertising, 20.99 N. B. Gas Light Co., 6.14 Richards, W. D., carriage hire, 118.00 Russell, Pardon, ice, 11.00 So. Massachusetts Telephone Co., 35.00 Waite, B. H., rent of office, 138.75 Whiting, E. B. & Co., towels, 4.85 1,110.39 Miscellaneous: Armory, heating apparatus, \$24.23 Armory rent, 75.00 Assessors, making out tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00		1.50	
N. B. Gas Light Co., Richards, W. D., carriage hire, Richards, W. D., carriage hire, Russell, Pardon, ice, Russell, Russe		6.23	
Richards, W. D., carriage hire, 11.00 Russell, Pardon, ice, 11.00 So. Massachusetts Telephone Co., 35.00 Waite, B. H., rent of office, 138.75 Whiting, E. B. & Co., towels, 4.85 1,110.39 MISCELLANEOUS: Armory, heating apparatus, \$24.23 Armory rent, 750.00 Assessors, making out tax-bills, 25.00 Austin, J. H. C., delivering tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 <td></td> <td>20.99</td> <td></td>		20.99	
Russell, Pardon, ice, 11.00 So. Massachusetts Telephone Co., 35.00 Waite, B. H., rent of office, 138.75 Whiting, E. B. & Co., towels, 4.85 1,110.39 MISCELLANEOUS: Armory, heating apparatus, \$24.23 Armory rent, 750.00 Assessors, making out tax-bills, 75.00 Austin, J. H. C., delivering tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.		6.14	
So. Massachusetts Telephone Co., Waite, B. H., rent of office, Whiting, E. B. & Co., towels, Miscellaneous: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Chase, J. H., carting, Coggeshall, Maxfield & Co., iron boxes, 30.75		118.00	
Waite, B. H., rent of office, Whiting, E. B. & Co., towels, Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., dinners, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Coggeshall, Maxfield & Co., iron boxes, 138.75 4.85 1,110.39 138.75 1,110.39 1,1	Russell, Pardon, ice,	11.00	
Whiting, E. B. & Co., towels, MISCELLANEOUS: Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, elerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., eigars, Chase, J. H., carting, Coggeshall, Maxfield & Co., iron boxes, 30.75	* /	35.00	
Armory, heating apparatus, \$24.23 Armory rent, 750.00 Assessors, making out tax-bills, 75.00 Austin, J. H. C., delivering tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	, , ,	138.75	
Armory, heating apparatus, Armory rent, Assessors, making out tax-bills, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, elerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., eigars, Chase, J. H., carting, Coggeshall, Maxfield & Co., iron boxes, 30.75	Whiting, E. B. & Co., towels,	4.85	1,110.39
Armory rent, Assessors, making out tax-bills, Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Coggeshall, Maxfield & Co., iron boxes, 30.75	MISCELLANEOUS:		
Assessors, making out tax-bills, 75.00 Austin, J. H. C., delivering tax-bills, 25.00 Baylies, Clifford, clerical help, 343.00 Baylies, Clifford, repairing clocks, 8.00 Bliss & Nye, gas lighter, 1.75 Borden, A. F., carriage hire, 14.00 Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	Armory, heating apparatus,	\$24.23	
Austin, J. H. C., delivering tax-bills, Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Coggeshall, Maxfield & Co., iron boxes, 343.00 B43.00 B43.00 B5.00 B6.00 B7.00	Armory rent,	750.00	
Baylies, Clifford, clerical help, Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Coggeshall, Maxfield & Co., iron boxes, 343.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	Assessors, making out tax-bills,	75.00	
Baylies, Clifford, repairing clocks, Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Coggeshall, Maxfield & Co., iron boxes, 8.00 10.00 8.00 8.00 9.55 10.00 1	Austin, J. H. C., delivering tax-bills,	25.00	
Bliss & Nye, gas lighter, Borden, A. F., carriage hire, Boston Daily Advertiser, Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., cigars, Coggeshall, Maxfield & Co., iron boxes, 14.00 12.00 13.13 10.00	Baylies, Clifford, elerical help,	343.00	
Borden, A. F., carriage hire, Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	Baylies, Clifford, repairing clocks,	8.00	
Boston Daily Advertiser, 12.00 Briggs & Lawrence, use of furniture, 31.13 Brown, John, use of wagon, 10.00 Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	Bliss & Nye, gas lighter,	1.75	
Briggs & Lawrence, use of furniture, Brown, John, use of wagon, Brown, W. S., flowers, Brownell, C. W., care cemetery lots, Brownell, H. M., carriage hire, Brownell, H. M., dinners, Butts, H. R., killing horses, Cannon, Albert, delivering tax bills, Chapman, E. T., eigars, Chase, J. H., carting, Coggeshall, Maxfield & Co., iron boxes, 31.13	Borden, A. F., carriage hire,	14.00	
Brown, John, use of wagon, 10.00 Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	· · · · · · · · · · · · · · · · · · ·	12.00	
Brown, W. S., flowers, 5.00 Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	7		
Brownell, C. W., care cemetery lots, 179.88 Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75		10.00	
Brownell, H. M., carriage hire, 236.90 Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., cigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	· · · · · · · · · · · · · · · · · · ·		
Brownell, H. M., dinners, 8.00 Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75			
Butts, H. R., killing horses, 29.55 Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75	, , , , , , , , , , , , , , , , , , , ,		
Cannon, Albert, delivering tax bills, 10.00 Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75			
Chapman, E. T., eigars, 25.00 Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75			
Chase, J. H., carting, 1.00 Coggeshall, Maxfield & Co., iron boxes, 30.75			
Coggeshall, Maxfield & Co., iron boxes, 30.75			
Cook, John S. & Son., carriage hire, 31.00			
	Cook, John S. & Son., carriage hire,	31.00	

Amount brought forward,		\$15,202.66
Cornell & Swift, carriage hire,	5.00	
Cummings, C. S. & B., matches, soap, &c.,	5.39	
Cushing, C. F., strap,	1.00	
Davis, Otis, labor,	15.00	
Dennison & Brown, ink,	7.65	
Derby & Kilmer Desk Co., desk,	72.00	
Devoll, George H., painting,	36.44	
DeWolf, Chas., carpentry,	87.03	
DeWolf & Vincent, hardware,	12.00	
	1,512.53	
Douglass, F. M., sundries,	13.12	
Douglass, J. O., messenger service,	1.00	
Drake, A. B., surveys, grades, plans, &c.,	538.12	
Driscol, Church & Hall, sundries,	32.50	
Dunlap, B. B., moving building,	45.00	
Dyer, Abraham, carpentry,	8.25	
Ellis, L. B., repairing painting "George Wash-		
ington," &c.,	72.00	
Expenses of city offices,	449.76	
Gifford, F. S., matches, soap, &c.,	1.25	
Gomley, John A., earting,	.50	
Greene, Clark, killing horses,	15.50	
Hadley, F. R., sundries,	40.75	
Hammond Type Writer Co.,	100.00	
Hart, T. M., flag and labor,	14.00	
Hasbrouck, F. S. & Co., bill cases,	25.50	
Haskins, C. W., ice set,	38.48	
Hathaway, L. J., hand barrow,	1.00	
Hayes, N. P., locks,	15.38	
Hillman, Jethro, carpentry,	10.39	
Hornblower, Dr. W. H. services in "glanders"		
cases,	211.67	
Howland, L. H., carpentry, veterinary hospital,	46.68	
Howland, Paul, Jr., printing bonds, &c.,	43.50	
Hutchinson, S., stationery,	9.59	
Interest on temporary loan,	4,621.80	
Jacobs, H., pens,	20.00	
Jay, James A., teaming,	5.00	
Kane, D. J. & Bro., books,	214.75	
Kempton, estate of David, 2d, land rent,	56.25	
Lawton, J. M., Jr., envelopes,	3.25	
Leonard, D. B., expenses,	99.55	
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amount brought forward,		\$15,202.66
Little, Brown & Co., law books,	13.00	
Macomber Bros., grain, veterinary hospital,	7.69	
Macy, Fredk., inspector of buildings,	110.55	
Mains, H. M., carpet beating,	1.16	
Matthews, John, reeving halliards,	2.00	
Maxfield & Pierce, tin boxes and lettering,	5.20	
McAfee, J. K., Mil. Instr. H. S. Cadets,	150.00	
Mills, M. T., clerical help,	412.50	
N. B. Band, services,	77.00	
No. Cong. Church, use of bell,	60.00	
N. B. Cordage Co., rope,	.70	
N. B. Ice Co.,	46.35	
Old Colony R. R. Co., safety gates at Sawyer		
St., and expense of gateman,	672.57	
Old Colony R. R. Co., sewerage privilege,	200.00	
Old Colony R. R. Co., tickets,	94.50	
Paul, Frank, delivering tax bills,	37.50	
Perry, S. F. & Son, carriage hire,	60.90	
Phillips, H. T., superintending delivery charcoal,	9.00	
Pope, A. P., target, rifle range,	7.25	
Post 1, G. A. R., award,	400.00	
Pratt, Winslow, charcoal,	37.44	
Purrington & Brown, cuspadores, mats, &c.,	8.10	
Reynolds, E. G., hacking,	5.00	
Richards, George D., dusters, mops, &c.,	27.48	
Richards, W. D., carriage hire,	5.00	
Richardson, George P., janitor,	582.06	
Rodgers, John D., delivering tax bills,	27.50	
Rodman, T. R., reports,	15.00	
Rotch, Morgan, expenses committee,	78.20	
Russell, C. C., clerical help,	660.00	
Russell, W. A., clerical help,	42.50	
Sherman, C. R. & Son, stationery,	10.57	
Sherman, W. H., carriage hire,	10.00	
Sisson, A. B., rent of rifle range,	35.00	
Snow & Gilbert, painting armory,	340.07	
So. Mass. Telephone Co.,	471.29	
Spooner, W. R., rent Pope's island,	100.00	
Steamer "Martha's Vineyard,"	125.00	
Sullivan, Jerry, burying horse,	5.00	
Terry, C. A. V., delivering tax bills, &c.,	42.00	
Tinkham, Otis, delivering tax bills,	16.25	

Amount brought forward,		\$15,202.66
Topham, Robert R., clerical help,	239.50	
Topham, W. B., paid expenses,	42.56	
Tripp, T. B., land appraisals,	20.00	
Tuell, Chas. A., delivering tax bills,	20.00	
Turner, J. H., dinner W. W. Association,	225.00	
Wady, A. B., painting,	3.90	
Watson, Samuel, 2d, book,	2.00	
W. U. Telegraph Co., messages,	2.78	
White, A. A. & Co., rubber stamps,	9.30	
Whiting, E. B. & Co., towels,	7.00	
W. & R. Wharf, rent,	150.00	
Willcox, D. B., sewer assessments,	40.00	
Wilson, Geo., care cemetery lots,	9.00	
Wood, Brightman & Co., tin boxes,	4.70	
Wood, E. B. & Son, carriage hire,	48.75	
Wright, J. S., tray,	.75	16,196.34
		\$31,399.00

CR.

By appropriations, General,	\$17,034.00	
"Special,	11,921.02	\$28,955.02
Transfer from:		
Free Public Library,	\$212.89	
Highways and Streets,	283.69	
Improvement of French avenue,	14.87	
Library Building, Addition to,	53.73	
Lighting the streets,	232.10	
N. B. & Fairhaven Bridge,	677.02	
Public schools, pay of teachers,	29.76	
" Thompson street furnishings,	.80	
Sewers, Cedar street, No. 3,	163.82	
Truant school,	575.30	2,243.98
Edison Electric III. Co., amount returned,		200.00
		\$31 399 00

LIGHTING THE STREETS.

DR.

Globe Gas Light Co.,	\$9,617.67	
N. B. Electric Illuminating Co.,	7,535.50	
N. B. Gas Light Co.,	10,387.01	\$27,540.18
MISCELLANEOUS:		
Anthony, E. & Sons, advertising,	\$13.33	
Davis, J. Herbert, painting lamp posts,	100.00	
Gomley, John A., cleaning lanterns,	16.00	
Kempton, F. A., estate, land rent,	25.00	
Mercury Pub. Co., advertising,	15.99	
Munroe, J. P. G., stone posts,	32.90	
Raymond, E. P., advertising,	4.50	
Whitehead Bros., carriage hire,	20,00	227.72
		\$27,767.90
To transfer to:		
Laundry at almshouse,	\$2,000.00	
Incidentals,	232.10	2,232.10
		\$30,000.00

CR.

By appropriation, \$30,000.00

NEW BEDFORD AND FAIRHAVEN BRIDGE.

DR.

Akin, John F., draw-tender,	\$600.00	
Akin, John F., expenses.	2,00	
Bryan Bros., salt,	2.20	
Chase, W. F., carpentry,	4.87	
Corson, T. S., coal,	4.75	
Cummings, C. S. & B., brooms,	1.00	
Driggs, J. D., bolts,	13.24	
Greene & Wood, lumber,	34.85	
Handy, Jonathan, spikes,	4.79	
Hayes, N. P., bolts,	2.20	
Hillman, Jethro, carpentry,	451.85	
Paisler, C. S., cement,	1.75	
Parker & Haskell, coal,	12.70	
Smith, R., blacksmithing,	9.06	
Sowle, F. L., sundries,	5.52	
Street Department, labor and teaming,	87.16	
Tillinghast & Terry, lumber,	68.21	
Tripp, S. A., pipe, &c.,	1.88	
West, W. R., paint and labor,	14.95	\$1,322.98
To transfer to incidentals,		677.02
		\$2,000.00

CR.

By appropriation, \$2,000.00

WATER WORKS.

DR.

SALARIES .	AND	LABOR:
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James H. Hathaway, registrar,	\$802.12	
R. C. P. Coggeshall, superintendent,	1,504.03	
Lewis Richardson, inspector,	852.30	
F. M. Ashley, foreman of pipe works,	902.42	
Clifford Baylies, clerk,	393.75	
C. E. Drake, clerk,	481.29	
H. T. Small, clerk,	336.45	
Joseph Perry, labor,	407.75	
C. R. Hathaway, labor,	7.50	
J. H. C. Austin, labor,	17.50	
A. H. Akin, labor,	59.50	\$5,764.61

SALARIES AND LABOR, PUMPING STATION:

Pay-roll,	3,675.42

FUEL:

Corson, T. S.,	\$2,136.29	
Garfield & Proctor,	10.50	
Gosnold Mills,	179.64	
Hart & Akin,	3,089.10	
Russell, J. A.,	81.19 5,49	6.72

REPAIRS OF PUMPING ENGINE, &c.:

Pay-roll,	\$268.19
Acushnet Iron Co.,	57.59
Boston Belting Co.,	20.48
Bowker & Tripp,	423.50
Brownell, H. M.,	200.35
Chalmers, Spence & Co.,	140.00
Coggeshall, Maxfield & Co.,	14.50
Corliss Steam Engine Co.,	82.67
Crosby Gauge Co.,	.60
Douglass, F. M.,	64.10
Driscol, Church & Hall,	5.50
Duddy, James,	5.35
Duff, David & Son,	3.36
Gifford, T. J. & Co.,	52.91

Amount carried forward,

\$14,936.75

Amount brought forward,		\$14,936.75
Grinnell Manufacturing Co.,	4.97	
Handy, Jonathan,	3.35	
Leonard & Ellis,	257.00	
Luce, F. C.,	2.58	
N. B. Boiler Co.,	.76	
N. B. Machine Co.,	30.13	
Old Colony R. R. Co.,	5.45	
Old Colony S. B. Co.,	7.63	
Paine, S. S. & Bro.,	83.78	
Paisler, C. S.,	8.47	
Palmer, N. F., Jr., & Co.,	80.32	
Potomska Mills,	32.60	
Quintan Iron Works,	6,500.00	
Robinson, James M.,	173.55	
Searell, Charles T.,	3.30	
Skiff, S. B.,	18.00	
Snow & Gilbert,	60.02	
Sullings, Kingman & Co.,	10.11	
Sumner & Goodwin,	55.57	
Tripp Packing Co.,	48.75	
Vacuum Oil Co.,	12.38	
Wamsutta Mills,	10.16	
Washburn, W. H.,	7.15	
West, Simeon N.,	83.20	
Wood, Brightman & Co.,	12.22	
Worthington, H. R.,	980.78	9,840.60
Repairs on Reservoirs and Conduits:		
Pay-roll,	\$3,229.14	
Brightman, Charles O.,	60.39	
Coffin Valve Co.,	1,225.00	
Corson, T. S.,	26.00	
Duddy, James,	7.00	
Duff, David & Son,	39.00	
Durfee, E. M.,	2.88	
Eggers, S.,	4.00	
Fuller, Dana & Fitz,	12.40	
Gray, Charles A.,	3.45	
Gilles, Alexander,	14.50	
Handy, Jonathan,	4.01	
Hart, T. M.,	5.80	
Hayes, N. P.,	11.15	
Amount earried forward,		\$24,777.35

Amount brought forward,		\$24,777.35
Holder & Herrick,	3.30	
Howland, C. A.,	11.14	
Luce, J. L.,	10.50	
Manchester, I. H.;	25.03	
Moulton, A. G.,	38.55	
N. B. Cordage Co.,	3.12	
Old Colony R. R. Co.,	. 8.21	
Paine, S. S. & Bro.,	6.60	
Paisler, C. S.,	297.35	
Perry, S. F. & Son,	52.50	
Reynolds, L. H.,	7.00	
Skiff, S. B.,	40.38	
Sullings, Kingman & Co.,	8.84	
Taber, Edward S.,	18.00	
Tillinghast & Terry,	16.69	
Wilson, Benjamin,	85.10	
Wilson, W. P.,	11.25	
Wright, S. A.,	10.00	5,298.28
		,
REPAIRS ON MAINS AND SERVICES:		
Pay-roll,	\$1,267.18	
Acushnet Iron Co.,	115.72	
Boston Belting Co.,	2.42	
Corson, T. S.,	.10.86	
Donaghy, Thomas,	8.92	
Gifford's Brass Foundry,	16.37	
Hart & Akin,	6.25	
Hart, Thomas M.,	12.07	
Hathaway, L. J.,	108.07	
National Meter Co.,	71.25	
Old Colony R. R. Co.,	.30	
Searell, Charles T.,	1.35	
Sloeum, F. R.,	3.70	1,624.46
Stocking 1 v Ltd,		-,
INCIDENTALS:		
Pay-roll,	\$907.56	
Acushnet Iron Co.,	13.23	
Allen, W. G.,	6.00	
American Supply Co.,	4.50	
Anthony, E. & Sons,	198.70	
Ashley, T. C.,	5.00	
Amount earried forward,		\$31,700.09

Amount brought forward,		\$31,700.09
Bertram, John & Co.,	14.63	
Billings, W. R.,	98.00	
Bliss & Nye,	9.50	
Bowker & Tripp,	15.65	
Briggs, Daniel D.,	31.85	
Briggs & Lawrence,	43.12	
Brightman, Charles O.,	60.66	
Brightman & Washburn,	1.65	
Brownell, G. W.,	34.74	
Brownell, H. M.,	24.25	
Buffalo Scale Co.,	144.38	
Chapman Valve Co.,	14.28	
Chapman & Shurtleff,	23.28	
City Treasurer,	123.30	
Coggeshall, Maxfield & Co.,	6.95	
Cornell, C. R.,	8.00	
Corson, T. S.,	7.12	
Cronin, William,	35.15	
Crosby Steam Gauge Co.,	3.71	
Dews, Edwin,	129.09	
DeMoranville, D. H.,	.25	
DeWolf & Vincent,	7.76	
Donaghy, Thomas,	2.20	
Drake, A. B.,	10.25	
Driscol, Church & Hall,	1.00	
Duddy, James,	6.25	
Duff, David & Son,	2.50	
Durfee Brothers,	2.75	
Eddy, Geo. M. & Co.,	48.15	
Edson Manufacturing Co.,	24.79	
Edson, M. B., Treas.,	6.50	
Ellis, L. B.,	3.30	
Fish Island Wharf & R. R. Co.,	200.00	
Flagg, O. H.,	8.00	
Fuller, Dana & Fitz,	25.86	
Fuller Iron Works,	3.85	
Geils, Gerett,	17.50	
Gifford, T. J. & Co.,	20 40	
Gifford, T. M.,	2.00	
Gosnold Mills,	42.25	
Gray, Charles A.,	3.75	
Greene & Wood,	72.03	

Amount brought forward,		\$31,700.09
Hadley, F. R.,	4.10	
Handy, Jonathan,	23.05	
Hartford Ins. Co.,	337.50	
Hayes, N. P.,	30.81	
Hart, T. M.,	3.86	
Hatch & Co.,	18.45	
Hathaway, L. J.,	157.55	
Hopkins, John,	3.70	
Hornblower, Dr. W. H.,	35.50	
Hutchinson, H. S.,	98.70	
Jenkins, B. S.,	38.68	
Jenney, P. P. & Son,	5.09	
Kane, D. J. & Bro.,	29.00	
Kelley, William L.,	1.00	
Lawton, C. H. & H. A.,	1.88	
Luce, J. L.,	23.37	
Manchester, Isaac H.,	17.78	
Mercury Pub. Co.,	42.31	
Morse Twist Drill Co.,	2.85	
Moulton, A. G.,	9.08	
N. B. Copper Co.,	8.72	
N. B. Cordage Co.,	5.75	
N. B. Fire Department,	15.10	
N. B. Gas Light Co.,	321.08	
N. B. Ice Co.,	8.00	
Old Colony R. R. Co.,	8.40	
Paine, S. S. & Bro.,	4.32	
Paisler, C. S.,	12.31	
Pasell, F. H.,	45.14	
Perkins, T. P. W.,	16.70	
Perkins & Staples,	39.35	
Perry, S. F. & Son,	. 76.00	
Price, Alexander,	6.04	
Richards, George D.,	.47	
Robinson, James D.,	42.20	
Rotch, Morgan,	115.79	
Rotch, William,	140.00	
Russell, C. C.,	4.50	
Russell, S. H.,	6.89	
Sealer Weights and Measures,	2.50	
Searell, Charles T.,	71.31	
Sherman, C. R. & Son,	1.16	

Amount brought forward,		\$31,700.09
Sherman, James L. & Co.,	28.44	
Skiff, S. B.,	7.17	
Southern Mass. Telephone Co.,	271.00	
Sowle, F. L.,	6.59	
Sturtevant & Sherman,	88.62	
Sullings, Kingman & Co.,	41.14	
Supt. Water Works,	106.99	
Tillinghast & Terry,	18.61	
Town of Acushnet,	24.66	
Union Shoe Store,	4.25	
Walker, George H. & Co.,	20.00	
Ward, M. J.,	59.50	
Washburn, W. H.,	7.13	
West, W. R.,	36.86	
Wilson, Benjamin,	90.00	
Wing, C. F.,	3.50	
Wood, E. B. & Son,	15.00	
Wood, J. A. & Co.,	8.57	
Wood, Brightman & Co.,	48.08	5,197.74

EXTENSIONS.

STREET MAINS:

Acushnet Iron Co.,	\$702.26	
Brightman & Washburn,	1.70	
Central Union Asso.,	3.01	
Chapman Valve Co.,	359.30	
Corson, T. S.,	545.37	
DeMoranville, D. H.,	1.20	
Eggers, S.,	7.00	
Gloucester Iron Works,	9,693.35	
Hart, T. M.,	9.97	
Jenkins, B. S.,	10.79	
King, W. T.,	6.10	
Russell, J. A.,	7.96	
Sawin, A. K. P.,	11.45	
Sturtevant & Sherman,	2.82	
Sylvia, A. A.,	3.54	
Warren Foundry Co.,	840.13	12,205.95
Amount carried forward		\$49 103 78

\$56,881.15

Amount brought forward,		\$49,103.78
SERVICES:		
Pay-roll,	\$1,834.39	
Acushnet Iron Co.,	207.93	
Boston Belting Co.,	4.56	
Boston Lead Co.,	1,634.01	
Bowker & Tripp,	2.82	
Brightman & Washburn,	12.74	
DeMoranville, D. H.,	1.50	
Durfee, E. M.,	5,05	
Fuller Iron Works,	31.20	
Flansburg, J. W.,	4.17	
Gifford's Brass Foundry,	454.85	
Gray, Charles A.,	5.57	
Holder & Herrick,	71.75	
Jay, James A.,	.35	
Jenkins, B. S.,	1.50	
Old Colony R. R. Co.,	30.10	
Paisler, C. S.,	3.00	
Roatch & Leary,	.90	
Searell, C. T.,	10.40	
Skiff, S. B.,	10.19	
Sumner & Goodwin,	30.54	
Underwood, W. R.,	10.06	
Ward & Curley,	24.00	4,391.58
Hydrants and Stop-Gates:		1,70 21770
Pay-roll,	\$160.87	
Bowker & Tripp,	3.90	
Chapman Valve Co.,	1,433.55	
Coffin Valve Co.,	590.00	
Duff, David & Son,	1.00	
Gammons, G. F. W., estate,	.25	
Gray, C. A.,	1.00	
Handy, C.,	1.50	
Mott, J. S., Iron Works,	106.00	
National Meter Co.,	450.18	
Old Colony Railroad Co.,	6.26	
Old Colony Steamboat Co.,	1.44	
Paisler, C. S.,	11.76	
Skift, S. B.,	2.50	
Sturtevant,	24.58	
Union Water Works Co.,	591.00	3,385.79

Amount brought forward,

\$56,881.15

LAROR, AND OTHER EXPENSES LAYING MAINS:

Pay-roll,	\$5,624.91
Anthony, E. & Sons,	26.50
Ashley & Boyle,	13.51
Bliss & Nye,	1.66
Bowker & Tripp,	2.65
Brightman & Washburn,	12.33
Corson, T. S.,	73.74
Crapo, Peter,	128.06
DeMoranville, D. H.,	3.25
Duddy, James,	70.43
Duff, David & Son,	80.00
Durfee Bros.,	2.55
Eggers, S.,	79.28
Flanders, E. P.,	3.75
Footman, J. W.,	6.74
Fuller, N. T.,	5.75
Gammons, G. T.,	14.85
Gosnold Mills,	7.74
Gray, C. A.,	5.31
Highways and Streets,	4.53
Hillman, Jethro,	12.70
Holder & Herrick,	574.92
Holmes, D. W.,	95.55
Mercury Pub. Co.,	25.31
N. B. Cordage,	120.20
N. B. Fire Dept.,	25.00
N. B. Gas Light Co.,	2.90
Old Colony Railroad Co.,	83.45
Old Colony Steamboat Co.,	76.25
Paine, S. S. & Bro.,	67.08
Paisler, C. S.,	69.58
Roatch & Leary,	19.66
Sawin, A. K. P.,	27.10
Sch. Hattie Perry,	14.23
Searell, C. T.,	10.00
Sherman, W. D.,	36.57
Skiff, S. B.,	102.97
Sturtevant & Sherman,	1.45
Sylvia, A. A.,	14.23
Taber, E. S.,	15.70
Tillinghast & Terry,	66.78
Wilson, Benjamin,	7.00

7,636.17

Amount carried forward,

\$64,517.32

\$64,517.32

Amount brought forward,

NEW EXTENSIONS:

CW EXTENSIONS:	
Pay-roll,	\$1,685.70
Acushnet Iron Co.,	13.38
Ætna Grate Bar Co.,	264.00
Bassett, C. H.,	13.28
Bliss & Nye,	6.69
Bowker & Tripp,	276.80
Braley, Osmond F.,	54.51
Brightman, Charles O.,	63.00
Brightman & Washburn,	230.35
Chalmers, Spence & Co.,	18.07
Church, W. N.,	. 16.00
Clark, Thomas & Sons,	2.43
Coggeshall & Co.,	35.70
Coggeshall, Maxfield & Co.,	67.23
Crosby Steam Gauge Co.,	89.25
DeWolf & Vincent,	. 2.00
Driscol, Church & Hall,	92.91
Duff, David & Son,	53.00
Durfee Bros.,	6.81
Eliot, Barnes & Co.,	15.47
Gifford, T. J. & Co.,	56.57
Greene & Wood,	96.75
Handy, Jonathan,	14.38
Hawes, William M.,	335.00
Hayes, N. P.,	. 8.72
Hillman, Jethro,	30.53
Highways and Streets,	114.00
Holman, Daniel W.,	5.78
Hollings, R. & Co.,	69.55
Lambert Bros.,	27.50
Lowe, S. C.,	5.40
Luce, F. C.,	4.38
McCue, John,	30.45
Morse Twist Drill Co.,	43.25
Nichols & Damon,	25.00
Old Colony Steamboat Co.,	7.22
Paine, S. S. & Bro.,	19.57
Paisler, C. S.,	103.09
Perkins & Staples,	35.40
Perry, S. F. & Son,	15.00
Redding, Baird & Co.,	90.00

Amount carried forward,

\$64,517.32

Amount brou	ght forward,		\$64,517.32
Robinson	, James M.,	493.52	
Sherman	W. D.,	15.60	
Sherman	, W. H.,	8.00	
Snow & (Gilbert,	597.18	
Sturtevar	nt & Sherman,	35.36	
	& Goodwin,	54.82	
19 /	Kingman & Co.,	10.50	
*	endent Water Works,	24.08	
	st & Terry,	9.64	
	n, W. H.,	76.17	
Wordell,		4.53	
_	gton, H. R.,	6,476.50	
,	rightman & Co.,	55.27	
Zoeggele	, A. L.,	15.12	12,020.41
	te, North Water street,		900.00
REPAIRS OF	BUILDINGS:		
Pay-roll,		\$134.30	
McCue, J		39.03	173.33
1887, Jan. 5.	To balance,		22,590.68
			\$100,201.74
	Cr.	-	
1886, Jan. 5.	By balance,	\$40,438.05	
,	Appropriation,	12,000.00	\$52,438.05
	Receipts from:		, , ,
	Rates,	\$43,584.68	
	Services,	3,530.99	
	Meters,	108.00	
	Turning off and on,	106.00	
	Rent,	104.00	
	Wharfage,	13.33	47,447.00
	Sale of:		,
	Pipe,	\$143.99	
	Hay,	139.40	
	Wagon,	33.30	316.69
			\$100,201.74
	Cr.		

POLICE DEPARTMENT.

DR.

S	A	T.	Α	R	T	10	S	

Isaac B. Tompkins, chief,	· ·	\$1,300.00	
Luther M. Dayton, captain	n,	900.00	
James L. Wilber, "		900.00	
Daniel A. Butler, lieute	enant,	800.00	
Thomas W. Comstock,	66	800.00	
Frederick Hussey,	: 4	800.00	
Ellery Peirce,	66	800.00	
Seth E. Bryant,		800.00	\$7,100.00
Pay-rolls patrolmen.			32,281.00

HOUSEKEEPERS:

Cushman, Frederick,	\$461.50	
Otto, Frederick,	457.50	
Robbins, Charles H.,	729.00	
Stevens, Michael,	474.30	2,122.30

SPECIAL POLICE:

Allen, Edgar W.,	\$124.70
Barbour, John R.,	5.20
Bennett, J. H.,	3.00
Buckley, A. R.,	181.40
Butts, H. R., Jr.,	160,60
Chadwick, C. T.,	20.40
Chase, A. A.,	10.60
Cushman, Frederick,	28.00
Cornell, C. F.,	48.40
Cornell, Stephen,	13.60
Corish, John,	4.00
Craft, James,	6.20
Davis, Otis A.,	38.00
Devine, Patrick,	155.80
Donaghy, Joseph,	51.00
Dumae, Peter,	250.20
Ferguson, William,	138.80
Gendron, George E.,	8.40
Gibbs, W. H. H.,	5.80
Howland, J. B.,	15.80

Amount earried forward,

\$41,503.30

Amount brought forward,		\$41,503.30
Howland, W. G.	11.20	
Jacobs, Julian,	338.80	
Jay, James A.,	4.20	
Jendron, George E.,	45.00	
Little, John E.,	104.00	
Lincoln, John,	2.80	
Martin, H. F.,	96.00	
McCarthy, B. F.,	261.80	
Moore, L. S., Jr.,	38.00	
Netcher, George F.,	213.40	
Otto, Frederick,	21.00	
Peckham, Samuel W.,	8.00	
Pinkham, George W.,	62.00	
Perry, S. C.,	20.00	
Russell, J. B.,	4.00	
Sampson, W. W.,	46.40	
Smith, Henry,	21.40	
Spooner, Joseph W.,	104.20	
Stevens, Michael,	43.80	
Thomson, John H.,	228.40	
Tinkham, J. S.,	42.00	
Weeden, C. H. L.,	219.40	3,205.40
HACKING AND CARRIAGE HIRE:		
Ashley, I. L.,	\$48.20	
Borden, A. F.,	66.20	
Bradley, W. E.,	45.65	
Brownell, H. M.,	64.20	
Brownell, J. F.,	117.70	
Cook, John S. & Son,	58.25	
Cornell, C. R.,	1.05	
Cornell & Swift,	42.75	
Dwelley, Andrew,	9.50	
Jay, James A.,	102.50	
Perry, S. F. & Son,	80.55	
Price, W. F.,	1.75	
Reynolds, E. G. & Co.,	56.20	
Richards, W. D.,	135.60	
Sherman, W. H.,	48.40	
Wood, E. B. & Son,	25.50	904.00

\$45,612.70

Amount brought forward,

\$45,612.70

MISCELLANEOUS:

ISCELLANEOUS.	
Anthony, E. & Sons, printing,	\$80.68
Barney, E. L., professional services,	25.00
Baylies, J. B., mattress,	2.50
Blake, James E., medicine,	18.15
Bliss & Nye, dusters,	14.00
Briggs & Lawrence, chairs, &c.,	29.65
Brownell, Dr. W. E., medical attendance,	1.50
Butler, D. A., keeper of lock-up,	100.00
Butler, D. A., expenses,	14.75
Cannavan, Patrick, expenses,	3.20
Case, E. T., janitor,	540.00
Case, E. T., feeding prisoners,	574.66
Case, E. T., washing,	119.05
Chapman, E. T., use of horse,	5.00
Coggeshall, Maxfield & Co., fitting hose, &c.,	3.95
Comstock, T. W., expenses,	2.00
Corson, T. S., coal,	326.12
Crapo's Steam Mill, wood,	1.00
Dayton, L. M., expenses,	9.93
Desmond, T. F., professional services,	10.00
DeWolf & Vincent, shovels,	5.53
DeWolf, Charles, carpentry,	28.80
Dews, Edwin, stationery, &c.,	100.35
Driscol, Church & Hall, soap, &c.,	19.37
Evans, D. & Co., buttons,	38.00
Fisher, H. H., crackers,	8.40
Folger, D. B., soap, &c.,	34.13
Gifford & Co., gloves,	5.25
Gifford, O. E., setting glass,	1.58
Gifford, T. J. & Co., pipe, &c.,	31.65
Hayes, Dr. S. W., medical attendance,	20.00
Howland, Dr. B. C., medical attendance,	4.00
Kelley, W. L., badges, &c.,	29.80
Kempton, F. A., land rent,	12.50
Lawton, C. H. & H. A., medicine,	7.75
Mackie, Dr. J. H., medical attendance,	4.00
McCullough, John, spade,	1.50
Mercury Publishing Co., printing,	25.19
N. B. Boiler & Machine Co., valve, &c.,	8.35
N. B. Gas Light Co.,	411.55
N. B. Ice Co., ice,	37.35

Amount carried forward,

Amount brought forward,		\$45,612.70
Needham, George & Co., plating buttons,	31.20	
Purrington & Brown, cuspadore,	3.00	
Raymond, E. P., advertising,	7.62	
Richmond, S. P. & Co., crackers,	9.57	
Sanders & Barrows, gloves,	3.00	
So. Mass. Telephone Co.,	308.60	
Soule, W. T., cloth,	4.50	
Sowle, F. A., clubs,	4.50	
Sweet, Dr. Job, medical attendance,	5.00	
Swift, M. C. & Son, wreaths,	6.88	
Taber, R. A. & Co., whitewashing, &c.,	27.88	
Taylor, Dr. W. H., medical attendance,	6.00	
Tillson, H. H., expenses on hat,	1.00	
Tompkins, I. B., expenses,	189.01	
Tripp, S. A., fitting pipe,	3.10	
Wing, C. F., rug, &c.,	8.15	
Wood, Henry T., estate, land rent,	20.00	
Wood, R. B., earpentry,	24.33	3,412.53
		\$49,025.23

CR.

By appropriation,	\$40,000.00	
Transfer from Unappropriated Funds,	5,177.44	\$45,177.44
Received from:		
Officers' fees and mittimuses,	\$3,375.84	
Rent of court-room,	400.00	3,775.84
John Cory, overpaid,	\$14.00	
Plymouth county, horse-hire,	53.95	
Poor Department, expenses,	4.00	71.95
		\$49,025,23

POOR DEPARTMENT.

DR.

OVERSEERS AND OTHER OFFICERS:

Bucklin, Ella F., assistant secretary,	\$336.44	
Clarke, C. A., Jr., secretary,	749.97	
Flanders, Rev. G. T., chaplain,	165.00	
Hathaway, T. B., visitor,	18.04	
Macy, P. S., superintendent at alms-house,	850.00	
Post, Dr. W. C., physician to the board,	1,608.38	
Taber, Marcus W., acting secretary,	120.00	
Willeox, H. R., superintendent at wood yard,	327.45	\$4,175.28

SUPPORT IN CITY OUTSIDE OF ALMS-HOUSE.

GRÖCERIES:

Acushnet Co-operative Association,	\$322.50
Allen & Coxen,	7.00
Alley, A. G., Jr.,	247.00
Andre, Jos.,	4.00
Bates, J. W. & Co.,	208.00
Bates, Lot B.,	75.00
Bliss, F. C.,	16.00
Boardman, Thos.,	166.00
Braley, J. W.,	181.00
Brierley, Samuel,	87.00
Brownell, C. H. & Son,	16.00
Canney, John F.,	5.00
Central Union Association,	559.80
Chappell, W. H.,	6.50
Chase & Ennis,	71.00
Chausse & La France,	18.00
Clarke, Robert,	89.00
Coe, I. H., Jr.,	102.00
Cota & Smith,	7.00
Covil & Rogers,	110.00
Cowling, I. C., Jr.,	9.00
Cummings, C. S. & B.,	168.50
Damon, Fred A.,	1.50
Darling Brothers,	23.00
Davenport, Dudley,	376.00
Davis, Charles S.,	156.50

Amount carried forward,

Amount brought forward,		\$4,175.28
Davis, James,	66.00	
Dennison, A. K.,	15.00	
Dugan, Michael,	397.50	
Dyer, J. E.,	150.00	
Folger, D. B.,	598.00	
Francis, A. J.,	40.00	
Francis, Isaac P.,	60.00	
Francis, J. B.,	. 150.75	
Frazier, E. M.,	9.00	
Gatie, Henry,	137.00	
Giroux & Lagasse,	6.00	
Greene, N. H., Jr.,	23.00	
Hammond, H. S.,	255.00	
Harrington, D. H.,	75.00	
Holcomb, Henry,	97.00	
Holcomb, Monroe,	1,100.50	
Holcomb & Francis,	22.00	
Howland, Chas. H.,	90.00	
Jenney Bros.,	776.00	
Kendrick, Allen T.,	16.00	
Lapham, John F.,	60.00	
Lawrence, T. W.,	2.00	
Lowe, John H.,	51.00	
Lowe, T. P. & Co.,	61.00	
Luther, H. R.,	113.00	
Macomber, George W.,	49.00	
Macomber, R. E.,	47.00	
Macomber, W. B.,	128.50	
Macy, George I.,	16.00	
McCloskey, John,	203.00	
Meaney, T. J.,	55.00	
Milliken, L. E.,	42.00	
Morse, F. & Co.,	287.00	
Moulton, F. F.,	157.50	
Notter, John,	16.00	
Nye, Alfred,	68.00	
Paige, J. H.,	130.00	
Patnaude, J. C.,	28.00	
Peirce, L. E.,	105.00	
Pelan, Thomas,	134.00	
Perry, Frank,	39.00	
Perry, Henry C.,	4.00	

AUDITOR'S REPORT.

Amount brought forward,		\$4,175.28
Rock, James,	86.00	
Shaw, J. H. & Son,	33.00	
Sherman, I. C. & Son,	45.00	
Sherman, Job B.,	389.26	
Sisson, J. S.,	62.00	
Snow, David S.,	21.00	
Spooner, E. F.,	38.00	
Stanton, A. G.,	47.00	
Sullivan Bros.,	81.00	
Sullivan, J. H.,	34.00	
Sweeney, John,	108.00	
Taber, J. C.,	33.50	
Taber, O. R. & Son,	61.00	
Tilton, J. M.,	44.00	
Tripp, Charles,	2.00	
Vinal & Tuell,	144.00	
Washburn, A. R.,	97.00	
Wilcox, George S. & Co.,	12.00	
Williams, M. S.,	6.00	
Wilson, William,	6.00	
Wood, Elihu, Jr.,	154.00	10,415.81
77 00d, 12111d, 01.,	104.00	10,410.01
BOOTS, SHOES AND CLOTHING:		
Donaghy, Thomas,	\$1.50	
Gifford & Co.,	10.00	
Lucas, A. E.,	2.00	
Nichols & Damon,	8.75	
Packard & Son,	6.00	
Palmer, A. R.,	6.50	
Sanders & Barrows,	126.00	
Soule, William T.,	3.00	
Taber, Read & Gardner,	73.50	
Union Boot & Shoe Co.,	29.15	
Whiting, E. B. & Co.,	1.38	267.78
Willeling, Et. B. C. Co.,	1.00	201.10
FUEL:		
Corson, T. S.,	\$1,723.70	
Russell, John A.,	450.18	
Street Department,	280.20	2,454.08
Server Department,	200.20	2,101.00
Amount earried forward,		\$17,312.95

Amount brought forward,	\$17,312.95

BURIALS:

Gifford, George E.,	\$12.00	
Jean, J. B.,	190.25	
Murphy, T. J.,	512.00	
Vaughan, W. C., Jr.,	148.00	
Williams, Joseph S.,	261.00	
Wilson, E. T.,	305.00	1,428.25

MISCELLANEOUS:

Anthony, E. & Sons, advertising and printing,	\$138.84
Banker & Tradesman, paper,	5.00
Bradley, William E., carriage hire,	6.00
Briggs & Lawrence, curtain,	5.24
Brownell, H. M., carriage hire,	8.00
Burbank, M. E., expenses to Taunton,	1.35
Case, C. A., medicines,	4.88
Caswell, A. R., carriage hire,	29.25
Chase, A. A., trans. insane persons,	3,50
Church, C. H., medicines,	.(55)
City Treasurer, cash orders,	2,899.94
Clarke, C. A., Jr., expenses,	24.35
Clarke, Mattie V., clerical help,	14.87
Coffin, W. H., hacking,	1.00
Coggeshall, Maxfield & Co., pipe, &c.,	4.50
Committee on relief,	300.00
Cook, John S., carriage hire,	7.20
Cornish, Dr. A., medical services,	10.00
Damon, Mrs. Phebe, board,	87.00
Dennison & Brown, ink,	2.50
Devine, Patrick, expenses to Tewksbury,	5.30
Dews, Edwin, books and stationery,	184.05
DeWolf, Charles, carpentry,	1.80
Douglass, F. M., medicines,	68.09
Dwelley, Andrew, hacking,	3.00
Enos, Edward E., medicines,	4.40
Gifford, T. J., & Co., gas fitting,	1.53
Hadley, F. R., medicines, &c.,	93.62
Hammond, E. G., board,	19.50
Hammond, M. E., board,	39.00
Hathaway, T. B., expenses,	3.75
Hayward & Slocum, repairing furniture,	5.50
, ,	

\$24,190.00

mount brought forward,		\$18,741.20
Hicks, H. E., medicines,	12.95	
Hillman, Jethro, carpentry,	37.22	
Howland, Dr. B. C., medical services,	3.00	
Hurll, C. W., spectacles,	2.50	
Hutchinson, S., stationery,	6.65	
Jay, James A., hacking,	1.00	
Jenney, P. P. & Son, shears,	1.50	
Lawton, J. M., Jr., stationery,	6.05	
Lowe, S. C., stove pipe,	3.38	
Macy, P. S., transferring insane persons,	2.50	
McLeod, E. V., dentistry,	10.00	
Mercury Pub. Co., advertising, &c.,	22.37	
N. B. Gas Light Co.,	5.50	
N. B. Ice Co.,	16.50	
Old Colony R. R. Co., transportation,	236.26	
Perry, S. F. & Son, hacking,	9.00	
Peterson, Dr. C. A. B., medical services,	2.00	
Piper, Mrs. A. D., washing towels,	2.00	
Piper, J. Arthur, care of office,	112.00	
Police Department, watcher,	4.00	
Post, Dr. W. C., extra attendance,	40.00	
Richards, George D., water tank,	6.50	
Russell, Pardon, Jr., ice,	18.00	
Sawyer, S. P., repairing stove,	1.25	
Scribner, Cynthia E., watching,	2.00	
Sherman, C. R. & Son, stationery, &c.,	5.35	
Sherman, J. C., repairing locks,	1.50	
Sherman, W. H., carriage hire,	20.45	
Shurtleff, I. H., medicines,	8.60	
Sisson, O. A., rent,	84.00	
Snow, Loum & Son, transportation,	178.00	
So. Massachusetts Telephone Co.,	106.50	
Sullavou, E., legal services,	77.65	
Sweet, Dr. Job, professional services,	15.00	
Taylor, H. J., brooms, &c.,	3.75	
Treshem, Ellen, nursing,	35.00	
Tinkham, J. S., board,	58.00	
Webber, Dr. Amos P., medical services,	20.00	
W. U. Telegraph Co., messages,	1.36	
Willcox, George S. & Co., medicines,	14.40	
Wood, E. B. & Son, carriage hire,	271.50	5,448.80

Amount brought forward,

\$24,190.00

PAID CITIES AND TOWNS FOR SUPPLIES AND BOARD OF PERSONS OUT OF THE CITY.

Acushnet,	\$14.45	
Boston,	379.60	
Cambridge,	13.50	
Chelsea,	23.50	
Dartmouth,	224.50	
Fairhaven,	160.29	
Fall River,	135.50	
Haverhill,	16.07	
Lakeville,	124.50	
Lawrence,	5.05	
Lowell,	20.00	
Mattapoisett,	158.41	
Nantucket,	124.04	
Topsfield,	52.00	
Wareham,	57.00	1,508.41

PAID STATE AND HOSPITALS FOR BOARD OF PERSONS OUT OF THE CITY.

Commonwealth of Massachusetts,	\$544.21	
Mass. School for Feeble Minded,	169.46	
Northampton Lunatic Hospital,	377.51	
Taunton Lunatic Hospital,	6,688.12	
Worcester Lunatic Hospital,	359.44	8,138,74

ALMS-HOUSE.

CLOTHING, HATS, &C.:

Devoll, P. & Son,	\$23.75
Doane & Sons,	15.25
Donaghy, Thomas,	14.66
Eddy, Geo. M. & Co.,	63.06
Faisneau, George E.,	91.19
Gifford & Co.,	16.00
Knowles, Joseph F.,	2.64
Lucas, A. E.,	10.50
Milliken, C. D.,	41.89
Nichols & Damon,	4.00

Amount carried forward,

\$33,837.15

Amount brought forward,		\$33,837.15
Palmer, A. R.,	39.18	
Sanders & Barrows,	50.35	
Soule, William T.,	125.30	
Taber, Read & Gardner,	14.25	
Tillson, H. H.,	4.65	
Union Boot & Shoe Co.,	6.00	522.67
FURNISHINGS AND SUPPLIES:		
Bennett, Samuel, crockery,	\$12.87	
Bliss & Nye, crockery,	14.24	
Borden, C. M., wood,	126.62	
Brownell & Co., paint, oil, &c.,	10.75	
Corson, T. S., eoal,	784.26	
Delano, George's Sons, oil,	12.30	
Fire Department, manure,	245.99	
Globe Gas Light Co., naphtha,	13.00	
Hayward & Slocum, mattress,	2.25	
Hicks, H. E., medicines,	7.55	
Homer, George S., oil,	21.50	
McCullough, John, hose leather,	79.36	
Wilson, W. P., tools, seeds, &c.,	85.60	1,416.29
GROCERIES, PROVISIONS AND GRAIN:		
Ashley, C. S.,	\$793.18	
Ashley, J. B., Jr.,	55.13	
Baylies, Wm.,	467.19	
Bond, W. R.,	9.50	
Brightman, E. T.,	213.30	
Brownell, E. C.,	206.75	
Cummings, C. S. & B.,	295.99	
Davis & Hatch,	133.25	
Denison Bros.,	552.44	
Driseol, Church & Hall,	707.58	
Ellis, Charles E.,	. 69.76	
Gifford, F. S.,	179.59	
Himes, John S.,	22.50	
Holcomb, Henry,	11.11	
Leonard, H. A.,	55.71	
Macomber Bros.,	485.87	
Potter, Wm. F. & Co.,	221.74	
Richmond, S. P. & Co.,	28.96	
Russell, Samuel H.,	52.30	
Wing, Samuel,	17.80	
Worth, W. J.,	21.00	4,600.65
Amount earried forward,		\$40,376.76

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Amount brought forward,		\$40,376.76
LABOR AND NURSING:		
Allen, Asa,	\$480.00	
Brown, John,	24.00	
Burbank, Mary E.,	260.26	
Butts, Albert,	21.75	
Butts, Henry R., Jr.,	360.00	
Chase, Albert A.,	540.00	
Crapo, Chas. W.,	420.00	
Martin, Julia,	67.13	
O'Connor, Alice,	63.21	
Raymond, Mary M.,	182.50	
Shields, Daniel R.,	336,00	
Winslow, Sarah,	107.30	2,862.15
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MISCELLANEOUS:		
Almy & Hitch, awnings,	\$7.75	
Anthony, E. & Sons, printing, &c.,	12.04	
Ashley, Emery, bull,	9.00	
Bancroft, J. V., earting water,	5.00	
Blackmer, H. A., medicines,	8.25	
Blake, James E., medicines,	36.04	
Briggs & Lawrence, repairs of furniture,	7.00	
Brownell, Ashley & Co., repairing wagons, &c.,	143.45	
Brownell, H. M., care of horse,	97.50	
Cronin, Wm., repairing harness,	15.80	
Cushing, C. F., repairing harness,	17.55	
Delano, Gustavus, whitewashing, &e.,	75.32	
DeWolf & Vincent, hardware,	36.88	
Donaghy, Thomas, shoe findings,	2.11	
Douglass, F. M., medicines, &c.,	19.02	
Dunlap, A. E., veterinary dentist,	2.00	
Forbes, J. R. & Co., shoeing and repairs,	118.38	
Greene & Wood, lumber,	6.25	
Hadley, F. R., medicines,	49.00	
Handy, Jona., bolts and iron,	6.63	
Hart, T. M., twine,	2.20	
Hart & Akin, glass, paint, &c.,	21.23	
Hayes, N. P., hardware,	15.48	
Hicks, H. E., medicine,	12.80	
Jenney, P. P. & Son, repairing tools,	6.72	
Jenney & Buffington, masonry,	5.25	
Kelley, W. L., repairing clocks,	4.25	
Lawton, C. H. & H. A., medicines,	21.50	

\$43,238.91

Amount brought forward,		\$43,238.91
McLeod, E. V., dentistry,	4.00	, , , , , , , , , , , , , , , , , , , ,
Mercury Pub. Co., "Mercury,"	6.00	
N. B. Boiler & Machine Co., repairs to boile		
&c.,	71.19	
N. B. Cordage Co., rope,	2.38	
N. B. Machine Shop, repairs,	1.78	
Nelson, George, whitewashing, &c.,	5.65	
Paine, S. S. & Bro., lime,	6.01	
Paisler, C. S., lime and cement,	7.64	
Pope & Wood, liquors,	16.00	
Richards, Geo. D., pails, brooms, &c.,	26.76	
Salisbury & Viall, use of oxen,	15.00	
Sherman, C. R. & Son, keys,	.95	
Sherman, J. C., repairing locks,	6.25	
Sherman, J. H., repairing stove,	6.25	
Sherman, W. D., shoeing oxen and horses,	23.98	
Southern Mass. Telephone Co., rent,	21.50	
Street Department, dressing,	101.62	
Sullings, Kingman & Co., hardware,	$\frac{101.02}{23.52}$	
Swan, W. D. & Son, repairing pump,	5,95	
Taunton Lunatic Hospital, pigs,	16.00	
Taylor, H. J., brooms, &c.,	4.88	
Tillinghast & Terry, lumber,	3.13	
Tripp, S. A., repairing tinware,	56.73	
	3.00	
Webber, Dr. Amos P., professional services,	92.05	
White, Phineas, pump and repairs,	118.82	7 477 44
Wood, Brightman & Co., plumbing, &c.,	115.52	1,411.44
		\$44,650.35
Cr.		
By appropriation,	\$30,000.00	
Transfer from unappropriated funds,	5,511.87	\$35,511.87
Received from:	0,011.01	there's arrect
Cities and towns for support of poor,		3,632.86
Commonwealth, state paupers,		2,399.52
Sale of farm produce,	\$362.10	2,000.02
Fire department,	336.30	
Street department,	130.15	
Truant school,	1,082.39	•
Soldiers and sailors,	288.00	
Board of persons, &c.,	907.16	3,106.10
Board of persons, des.,	707.10	
		\$44,650.35

CITY DOCUMENT No. 8. February,

PUBLIC DEBT.

DR.

To principal (bonds) paid, Interest on bonds, Interest on trust funds, \$35,000.00 64,232.50 6,246.00 \$105,478.50

CR.

By appropriation,

Transfer from unappropriated funds,
Accrued interest on bonds,

\$104,626.00 692.08 160.42 \$105,478.50

PUBLIC SCHOOLS—PAY OF TEACHERS.

DR.

HIGH SCHOOL.

Charles P. Rugg,	\$1,187.50	
Ray Greene Huling,	1,000.00	
Charles T. Bonney, Jr.,	1,640.00	
Nathaniel Hathaway,	687.50	
Charles R. Allen,	440.00	
Sarah D. Ottiwell,	820.00	
Lizzie P. Briggs,	820.00	
Lydia J. Cranston,	820.00	
Mary E. Austin,	. 820.00	
Lucretia N. Smith,	820.00	
Carrie E. Hatch,	717.50	
Emma H. Wheeler,	615.00	\$10,387.50

GRAMMAR SCHOOLS.

FIFTH STREET:

Allen F. Wood,	\$1,742.50	
Mary A. Kane,	563.75	
Sarah A. Carr,	563.75	
Sarah E. Stoddard,	563.75	
Lydia J. Macreading,	563.75	
Kate N. Lapham,	563.75	
Helen L. Hadley,	563.75	
Jeannette Hunter,	563.75	
Lizzie B. Brightman,	562.75	
Emma J. Ashley,	561.75	
Mary E. Allen,	555.75	
Helena Kennedy,	167.88	7,536.88

MIDDLE STREET:

George H. Tripp,	\$1,742.50
Kate Commerford,	563.75
Clara S. Vincent,	563.75
Hattie Hart,	563.75
Mabel W. Cleveland,	563.75
Agnes J. Dunlap,	555.75
Mary R. Hinckley,	550.75
Hannah C. Arey,	512.75

Amount carried forward,

\$17,924.38

CITY	DOCUMENT	No. 8.	February,
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Amount brought forward,		\$17,924.38
Mary G. Bonney,	320.63	
Maria B. Clarke,	286.88	
Jane E. Finkill,	192.50	
Evelyn S. Wordell,	175.00	
Lucy B. Fish,	157.94	6,749.70
PARKER STREET:		
Charles E. E. Mosher,	\$1,725.50	
Eliza J. D. Shepherd,	563.75	
Martha A. Hemenway,	563.75	
Helen M. Gordon,	563.75	
S. Flora Spare,	563.75	
Anna L. Jennings,	563.75	
Emma Shaw,	563.75	
Mary A. Codding,	563.75	
Sarah L. Spare,	561.75	
Annie Braley,	528.50	
Josephine Almy,	496.88	
Emma C. Nash,	494.88	
Emma A. McAfee,	481.25	8,235.01
THOMPSON STREET:		
George Rugg,	\$860.00	
Mary A. Macy,	563.75	

George Rugg,	\$860.00
Mary A. Maey,	563.75
Abby F. Sullivan,	563.75
Sarah W. Almy,	532.50
Helen C. Allen,	468.05
Annie C. O'Connor,	455.63
Helen J. Kirke,	176.53
Carrie S. Silva,	64.00 3,684.21

PRIMARY SCHOOLS.

ACUSHNET AVENUE:

70

Jane E. Gilmore,	\$562.15
Sarah E. Kirwin,	486.88
Minnie E. McAfee,	486.88
Marianna N. Richmond,	486.88
Susie Lucas,	485.28
Mary J. Eldridge,	482.88

Amount carried forward,

\$36,593.30

Amount brought forward,		\$36,593.30
Carrie E. Pitman,	228.80	
Hattie S. Damon,	133.12	
Maria B. Clarke,	112.00	
Helena Kennedy,	69.06	3,533.93
Former Connection		
FOURTH STREET:		
Sarah H. Cranston,	\$563.75	
Naney H. Brooks,	486.88	
Clara B. Watson,	486.88	
Eliza H. Sanford,	486.08	
Sarah E. Sears,	486.08	2,509.67
CEDAR STREET:		
Annie S. Homer,	\$563.75	
Abby D. Whitney,	486.88	
Emma B. Allen,	444.03	
Willetta B. Niekerson,	401.18	
Annie L. Edwards,	394.38	2,290.22
MERRIMAC STREET:		
Sarah H. Hewins,	\$563.75	
Addie West,	486.88	
Isadora Foster,	474.88	
Helen J. Kirke,	308.75	
Lucy B. Fish,	319.98	
Hattie S. Damon,	127.50	2,281.74
GROVE:	,	
Jane C. Thompson,	\$556.55	
Sarah E. Tuell,	486.88	
Hattie Finlan,	486.88	
Nellie Davis,	486.88	
Mary Barstow,	195.20	2,212.39
KEMPTON STREET:		
Eleanor Commerford,	\$563.75	
Kate Cleary,	486.88	
Bessie P. Pierce,	483.68	
Ida G. Howard,	417.63	
Susan Graffam,	178.40	2,130.34
Amount carried forward,		\$51,551.59

Amount brought forward,		\$51,551.59
LINDEN STREET:		
Elizabeth P. Spooner,	\$562.15	
Lucy S. Leach,	486.88	
Isabella Luscomb,	486.88	
Mary E. Sturtevant,	486.88	2,022.79
DARTMOUTH STREET:		
Isadore F. Eldridge,	\$563.75	
M. Eva Schwall,	486.88	
Annie Carpenter,	486.08	
Sara H. Kelley,	474.08	2,010.79
MAXFIELD STREET:		
Mary B. White,	\$563.75	
Sarah E. Field,	486.88	
Annie E. Pearce,	486.88	
Bessie Nash,	435.63	1,973.14
CEDAR GROVE STREET:		
Lucy F. Clarke,	\$532.50	
Carrie Shaw,	394.38	
Emily A. Delano,	394.38	
Flora Estes,	379.98	
Grace H. Potter,	204.80	
Lizzie E. Omey,	59.20	1,965.24
WILLIAM STREET:		
Abbie F. Bryant,	\$555.75	
Amelia Lincoln,	486.88	
Mary J. Graham,	486.88	
Clara C. M. Gage,	394.38	1,923.89
ARNOLD STREET:		
Susan M. Tompkins,		589.38
MILL SCHOOLS.		
NORTH MILL:		
Emma R. Wentworth,	\$663.30	
Annie P. Underwood,	540.00	
Addie J. McFarlin,	490.40	1,693.70
Amount earried forward,		\$63,730.52

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Amount brought forward,

\$63,730.52

SOUTH MILL:

Lucy J. Remington,

616.00

COUNTRY SCHOOLS.

ACUSIINET:

Charlotte C. Carr, \$717.50 Mary F. Sylvia, 425.00

Selene E. Sherman, 333.13 1,475.63

CANNONVILLE:

Jennie S. King, \$493.68

May L. Petty, 437.63 931.31

CLARK'S POINT:

Lillie B. Allen, \$507.70

Annie L. Macreading, 244.80 752.50

NORTH:

Mary Ashley, 486.88

ROCKDALE:

Alice L. Tripp, \$369.60

Lillian L. Turner, 82.53 452.13

PLAINVILLE:

Ruth A. Allen, 358.75

DRAWING TEACHER.

Arthur J. Cumming, 1,691.25

SINGING TEACHER.

Fred L. Diman, 1,351.50

SEWING TEACHERS.

Carrie H. Richmond, \$512.50 Eliza Smalley, 205.00

Gertrude Leonard, 205.00 922.50

Amount earried forward, \$72,768.97

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Amount brought forward,

\$72,768.97

1,197.00

EVENING SCHOOLS.

Not	RTH	Ev	ENT	NG:

Robert F. Raymond,	\$222.00
Nathaniel W. Gifford,	161.00
Mrs. Clara Harris,	149.00
Eloise A. Hafford,	149.00
Lizzie E. Omey,	135.50
Lillie C. Tillinghast,	70.50
Mrs. Ruby M. Tripp,	66.50
Helena Kennedy,	65.00
Abby R. Johnson,	53.75
Sara L. Tallman,	46.50
Annie G. Brawley,	43.75
Grace H. Potter,	34.50

SOUTH EVENING:

Oliver W. Cobb,	\$222.00	
Mrs. S. C. Whelden,	161.00	
Joseph P. Kennedy,	149.00	
Mrs. Kate Johnson,	149.00	
Chella F. Carpenter,	141.37	
Carrie S. Silva,	69.00	
Mary G. Bonney,	65.00	
Nellie Eldridge,	43.50	999.87

CENTRAL EVENING:

Mrs. S. W. Wilde,	\$210.00	
Cora Cleveland,	149.00	
Kate Sweet,	125.00	484.00

SUBSTITUTES:

Chella Carpenter,	\$95.80
Lillie C. Tillinghast,	64.00
Belle Wheeler,	56.00
Helena Kennedy,	44.90
Hattie S. Damon,	42.40
Abby R. Johnson,	30.40
Lizzie E. Omey,	30.40
Carrie S. Silva,	25.60

Amount carried forward,

\$75,449.84

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AUDITOR'S REPORT.

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Amount brought forward,	\$75,449.84
Grace H. Potter,	16.00
Annie G. Brawley,	10.40
Mary Barstow,	10.40
Eloise Λ. Hafford,	10.00
Lena Chubbuck,	4.80
Annie L. Macreading,	4.80
Mary Raymond,	4.00
Mrs. R. F. Raymond,	2.50 452.40
	\$75,902.24
To transfer,	29.76
	\$75,932.00

CR.

By appropriation,	\$72,000.00	
Special appropriations,	3,900.00	
Amount returned, overpaid,	32.00	\$75,932.00

PUBLIC SCHOOLS—REPAIRS OF BUILDINGS.

DR.

\$3.60	
10.05	\$13.65
\$28.80	
2.70	
132.11	
6.29	169.90
\$9.27	
11.00	20.27
\$66.95	
3.59	
105.83	
2.00	178.37
\$7.82	
14.94	
180.12	
8.79	
74.00	285.67
\$.75	
76.50	
23.55	
22.50	
2.27	
5.25	
11.95	
14.00	156.77
	\$824.63
	\$28.80 2.70 132.11 6.29 \$9.27 11.00 \$66.95 3.59 105.83 2.00 \$7.82 14.94 180.12 8.79 74.00 \$.75 76.50 23.55 22.50 2.27 5.25 11.95

Amount brought forward, Clark's Point:		\$824.63
	0.1 = 0.3	
Chase, Ezra B., carpentry, Jenney & Buffington, masonry,	\$17.92 2.55	
White, Phineas, repairing pump,	4.00	24.47
white, I filleas, repairing pump,	4.00	24.41
DARTMOUTH STREET:		
Almy, George L., carpentry,	\$5.89	
Chase, Ezra B., earpentry,	51.92	
Hart, T. M., duck,	11.57	
Maxfield, William & Son, painting,	163.03	
Penney, E. F., repairing water pipe,	2.00	
Sowle, F. A., blinds,	18.88	253.29
FIFTH STREET:		
Bertram, John & Co., concreting,	\$11.70	
Deans, Thomas, labor,	8.00	
Gifford's brass foundry, wash bowl,	3.78	
Greene & Wood, lumber,	80.03	
Hart & Akin, painting,	125.04	
Russell, D. J., earpentry,	71.40	
Tripp, S. A., furnace and fitting,	232.28	532.23
FOURTH STREET:		
DeWolf, Charles, earpentry,	\$290.21	
Gifford's brass foundry, water closets, &c.,	430.80	
Gifford, T. J., & Co., globes,	.15	
Peirce, A. B., whitewashing,	6.10	
Snow & Gilbert, painting,	55.47	
Taber, R. A. & Co., masonry,	10.25	792.98
GROVE:		
Chase, Ezra B., carpentry,	\$72.45	
Jenney & Buffington, masonry,	9.74	
Lumbert, John, labor,	15.60	
Maxfield, William & Son, painting,	144.56	242.35
	22200	
HIGH SCHOOL:		
Brownell & Co., paint,	\$23.60	
Hart & Akin, painting,	251.39	
Jenkins, B. S., glazing,	1.00	
Perkins & Staples, slate,	. 24.60	
Taber, R. A. & Co., masonry,	2.25	302.84
Amount carried forward,		\$2,972.79

Amount brought forward, KEMPTON STREET:		\$2,972.79
Look, J. W., carpentry,	\$139.24	
Sturtevant & Parker, painting,	6.02	
West, Wm. R., painting,	3.75	
Wood, Brightman & Co., handles,	.85	149.86
LINDEN STREET:		
Holmes, D. W., masonry,	\$10.05	
Swift, P. R., carpentry,	13.26	
Taber, Marcus, carpentry,	11.66	
Thompson, Charles, painting,	33.50	68.47
MAXFIELD STREET:		
Gifford, T. J. & Co., plumbing,	\$70.04	
Look, John W., carpentry,	13.39	
Sawyer, G. T., masonry,	56.71	140.14
MERRIMAC STREET:		
Perkins & Staples, zinc,	\$46.80	
Thompson, Charles, painting,	45.49	92.29
MIDDLE STREET:		
Babbitt, Wood & Co., piping,	\$218.58	
Clark, Ezra, carpentry,	49.05	
Coggeshall, Maxfield & Co., fitting roof,	66.71	
Holmes, D. W., masonry,	17.91	
Lewis, B. F., painting,	340.94	
N. B. Boiler & Machine Co., tube scraper,	3.00	
Snow & Gifford, carpentry,	27.32	
Thompson, Charles, painting,	2.04	725.55
PARKER STREET:		
Hatch, George E., pipe,	\$11.91	
Hayes, N. P., hardware,	2.02	
Hillman, Jethro, carpentry,	185.41	
Johnson, William, whitewashing,	8.00	
Lewis, B. F., painting,	118.28	
Sherman, J. L. & Co., carpentry,	46.77	
Skiff, S. B., eastings,	20.65	
Tillinghast & Terry, lumber,	73.68	
Washburn, William H., lumber,	16.83	483.55
Amount carried forward,		\$4,632.65

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AUDITOR'S REPORT.

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Amount brought forward,		\$4,632.65
PLAINVILLE:		
Faunce, Loum, carpentry,		20.09
ROCKDALE:		
Faunce, Loum, carpentry,	\$25.42	
White, Phineas, repairing pump,	5.15	30.57
WILLIAM STREET:		
Coggeshall, Maxfield & Co.,	\$.70	
Haskins, O. & Son., carpentry,	127.15	
Sturtevant & Parker, painting,	89.62	
Tillinghast & Terry, lumber,	96.18	313.65
MISCELLANEOUS:		
Dammon, Geo. K., glass,	\$1.00	
DeWolf & Vincent, hardware,	7.31	
Jenney & Buffington, masonry,	87.16	
Russell, D. J., earpentry,	89.87	
Tripp, H. W., earpentry,	24.56	209.90
		\$5,206.86

CR.

By appropriation,	\$5,200.00	
Transfer from unappropriated funds,	6.86	\$5,206.86

PUBLIC SCHOOLS—THOMPSON STREET FUR-NISHINGS.

DR.

Almy & Hitch, shades, &c.,	\$94.45	
Bliss & Nye, polish,	1.50	
Delano, George's Sons, cases,	.40	
DeWolf & Vincent, tools,	33.59	
Hazzard, J. B. & Son, lining boards,	14.89	
Hillman, Jethro, carpentry,	406.07	
Holmes, A. W., wood,	5.50	
Hurll, C. W., clocks,	15.00	
Lewis, B. F., painting,	41.81	
Look, J. W., carpentry,	8.46	
Lloyd Bros., slating,	14.58	
McFarlin, James, carting,	1.35	
Moulton, A. G., earting,	6.10	
Netcher, Geo. F., carting,	.75	
Old Colony R. R. Co., freight,	8.74	
Penney, E. F., washbowls and plumbing,	85.00	
Perry, George S., pencil sharpeners,	3.50	
Purrington & Brown, dusters, &c.,	14.48	
Richards, George D., brushes,	12.57	
Russell, D. J., carpentry,	3.32	
Sherman, C. R. & Son, gongs, &c.,	28.45	
Tillinghast & Terry, lumber,	9.82	
Whiteomb, A. G., desks and tables,	138.74	
Wood, Brightman & Co., radiators, &e.,	169.31	
Wood, James A., washing towels and expenses,	6.50	\$1,124.88
To transfer to incidentals,		.80
		\$1,125.68

CR.

1886, Jan. 5. By balance,

\$1,125.68

PUBLIC SCHOOLS—DOG FUND.

DR.

Barbour, John R., janitor, Thompson, J. D., rent, 1887, Jan. 5. To balance, \$50.00 350.00

\$400.00 793.99

\$1,193.99

CR.

1886, Jan. 5. By balance, Amount received from County Treasurer, \$411.47 782.52

\$1,193.99

CR.

1887, Jan. 5. By balance,

\$793.99

REAL ESTATE NO. 230 CEDAR STREET.

(W. T. LUCE, OCCUPANT.)

DR.

To paid Thomas T. Caswell, under sale,

\$983.12

CR.

1886, Jan. 5. By balance,

\$983.12

REAL ESTATE TAX ACCOUNT.

1886, Jan. 5. To balance, Paid taxes and costs on	\$187.69 real estate, 83.81	\$271.50
C_R .		
By amounts received of:		
Antone Caton, tax of 1883,	\$16.88	
George P. Law, tax of 1884,	18.28	
J. R. Linton, tax of 1878,	28.45	
W. J. Wood's estate, tax of 1883,	14.30	\$77.91
1887, Jan. 5. By balance,		193.59
, 		\$271.50
Dr.		
1887, Jan. 5. To balance.		\$193.59

LIBRARY BUILDING ADDITION.

D_R .

Acushnet Iron Co., fence palings,	\$109.52	
Bennett, Richard, cases,	1,404.75	
Bliss, M. H., earpentry,	68.50	
Bliss & Nye, shades and fixtures,	99.75	
Borden, C. F., counters and tables,	825.91	
Brownell & Murkland, steps and curbing,	585.52	
DeWolf, Charles, carpentry,	20,62	
Edison Electric Illuminating Co., fixtures,	598.48	
Gay, George W., part of contract,	7,950.50	
Hammond, C. & Son, plans and specifications,	648.00	
Hammond, F. W., shutters,	136.43	
Hayes, N. P., hardware,	44.27	
Hillman, Jethro, earpentry,	935,43	
Moriarty Bros., painting,	910.41	
N. B. Boiler & Machine Co., furnace and repairi		
boiler,	934.67	
N. B. Water Works, putting in service,	10.45	
Paisler, C. S., tiles,	19.70	
Palmer, E. C., stairs,	250.00	
Skiff, S. B., labor on fence,	149.28	
Street Department, digging cellar,	227.44	
Tillinghast & Terry, lumber,	3.43	
West, W. R., painting,	30.31	
Wing, C. F., carpets,	81.40	\$16,044.77
To transfer to incidentals,		53.73
		\$16,098.50

CR.

1886, Jan. 5.	By balance,	\$7,598.50
	Appropriations, Special, 1886,	8,500.00

\$16,098.50

REPAIRS OF CITY PROPERTY.

D_R .		
Alms-house:		
Perkins & Staples, repairing roof,		\$26.83
CITY HALL BUILDING:		
Blossom, S. J., carpentry,	\$16.45	
Brightman & Washburn, drafting tables,	102.05	
Gifford, T. J. & Co., plumbing,	46.48	
Greene & Wood, lumber,	50.32	
Hayes, N. P., hardware,	4.01	
Hillman, Jethro, carpentry,	16.20	
Jenney, P. P. & Son, sharpening and repairing		
tools,	4.08	
Lowe, S. C., hardware,	28.05	
Moriarty Bros., painting,	1.42	
Richards, George D., mops, brooms, &c.,	12.05	
Sherman, J. C., fitting locks, Sowle, F. L., hardware,	.85 8.27	
Sullings, Kingman & Co., iron fence, &c.,	48.12	
Tillinghast & Terry, lumber,	31.20	
Wady, A. B., glazing,	$\frac{31.20}{1.25}$	
West, W. R., painting,	118.14	
Whittemore, M. F., lye,	2.25	
Wing, C. F., carpets and labor,	37.49	
Wood, Brightman & Co., plumbing,	5.00	533.68
CITY HALL SQUARE:		
Babbitt, Wood & Co., pipe and labor,	\$10.98	
Macomber Bros., grass seed,	1.66	
Maxfield, Russell, superintendent,	313.50	
West, W. R., painting settees,	46.85	372.99
CITY STABLES:		
Hammond, F. W., earpentry,		58.00
Common:		
Almy & Hitch, bunting and labor,	\$3.85	
DeWolf & Vincent, grass seed,	12.50	
Doran, William, stone cutting,	1.92	
Durfee, E. M., blacksmithing,	7.03	
Gillis, Alexander, dressing and labor,	19.34	
Amount carried forward,		\$991.50

Amount brought forward,		\$991.50
Jenney, P. P. & Son, settees, tools and labor,	222.05	4002100
Nelson, George, masonry,	1.90	
Paisler, C. S., curbing,	147.10	
Russell, S. H., oil,	13.38	
Sullings, Kingman & Co., hardware,	3.58	
Street Department, curbing and flagging,	282.30	
Taber, C. C., superintendent,	547.50	
Taber, E. S., repairing pump,	10.17	
White, Phineas, pump and labor,	37.61	1,310.23
LIBRARY BUILDING:		
Ames, Yorick W., cleaning,	\$66.00	
Blossom, S. J., carpentry,	175.68	
Briggs & Lawrence, furniture and repairs,	58.20	
Cranston, O. W., shades and labor,	76.20	
DeWolf, Chas., carpentry,	20.10	
DeWolf & Vincent, hardware,	.88	
Donaghy, Thos., hose,	14.25	
Duff, David, carting stone,	60.49	
Gifford, T. J. & Co., plumbing, &c.,	27.18	
Hart & Akin, glazing,	2.50	
Hayes, N. P., hardware,	68.82	
Hillman, Jethro, carpentry,	429.46	
Jenney, P. P. & Son, labor,	6.29	
Lowe, S. C., plumbing,	22.59	
Maxfield & Pierce, plumbing,	16.49	
Moriarty Bros., painting,	171.85	
N. B. Boiler & Machine Co., heating apparatus,	596.19	
N. B. Gas Light Co., pipe and labor,	5.50	
Peirce, Wm., labor on lawn,	133.35	
Piper, J. Arthur, cleaning,	11.20	
Richards, Geo. D., brooms, &c.,	8.50	
Sawyer, S. P., zinc plates,	6.90	
Sherman, J. C., repairing locks,	11.25	
Sherman, J. H., chimney caps,	45.70	
Sherman, R. A. & Son, labor,	.75	
Skiff, S. B., blacksmith,	10.12	
Sullings, Kingman & Co., hardware,	3.80	
Tillinghast & Terry, lumber,	2.29	
Wady, A. B., glazing,	4.00	
Whiting, E. B. & Co., felting,	2.50	
Wing, C. F., carpets and labor,	71.17	
Wood, Brightman & Co., labor.	.85	2,131.05
Amount earried forward,		\$4,432.78

Amount brought forward,	\$4,432.78
Police Stations:	
Maxfield, Wm. & Son, painting, \$6.09	
N. B. Boiler & Machine Co., castings, 3.18	
Sullivan, M. H., carpentry, 12.00	
Taber, Chas. H., masonry, 30.69	
West, W. R., painting, 7.76	0= 00
Wood, Brightman & Co., pipe and labor, 6.17	65.89
WARD ROOMS:	
N. B. Gas Light Co., gas fitting, \$40.35	
Sherman, R. A. & Son, carpentry, 3.72	
Wood, Brightman & Co., labor, 11.65	55.72
WOOD YARD:	
Hammond, F. W., carpentry,	30.55
MISCELLANEOUS:	
Anthony, E. & Sons, advertising, \$18.17	
Brownell, Ashley & Co., repairing bell city	
clock,	
Mercury Pub. Co., advertising, 24.66	
Swift, T. W., repairing pump, 7.75	
White, Phineas, repairing pump, 2.25	53.43
	\$4,638.37
Cr.	
1886, Jan. 5. By balance,	\$687.51
Appropriation, General, \$3,500.00	4
" Special, 266.80	
Transfer from Unappropriated	
Funds, 180.21	3,947.01
Amount returned,	3.85

	\$4,638.37

CYPRESS STREET EXTENSION.

Dr.

McFarlin, Ann, Russell, W. Λ.,	\$623.00 831.60	
Wood, Elihu, Jr.,	547.00	\$2,001.60
	-	
Cr.		
By special appropriation,	\$601.60	
Transfer from North Cottage Street Extension,	1,400.00	\$2,001.60

NORTH COTTAGE STREET EXTENSION.

Chadwick, George, Estate of,	\$3,000.00	
Corish, James,	1,000.00	
Gifford, Elijah, Estate of,	600.00	
Gomley, Alexander, Estate of	1,500.00	
Haskins, Orville,	700.00	
McFarlin, S. W.,	2,350.00	
Nicholas, Elizabeth,	250.00	
Ray, Isaiah C., Estate of,	900.00	
Wadsworth, Louisa,	300.00	\$10,600.00
To transfer to Cypress Street Extension,		1,400.00
		\$12,000.00
Cr.		
By special appropriation,		\$12,000.00

IMPROVEMENT OF FRENCH AVENUE.

DR.

Pay-rolls, labor,	\$5,385.78	
Ashley, Rodolphus, Estate of, gravel lot,	1,500.00	
Duff, David & Son, picks,	18.00	
Durfee, E. M., sharpening tools, &c.,	37.84	
Fichtenmayer & Flynn, sharpening tools,	26.22	
Greene & Wood, lumber,	28.26	
Lowe, S. C., shovels,	45.00	
Roatch & Leary, sharpening tools,	30.95	
Sawyer, S. P., buckets,	3.60	
Sherman, R. A. & Son, carpentry,	17.15	
Street Department, labor and teaming,	882.15	
Taber, C. G., sharpening tools,	8.11	
Washburn, W. H., lumber,	2.07	\$7,985.13
To transfer to Incidentals,		14.87
		\$8,000.00
Ca		
CR.		
By special appropriation,		\$8,000.00
Roatch & Leary, sharpening tools, Sawyer, S. P., buckets, Sherman, R. A. & Son, earpentry, Street Department, labor and teaming, Taber, C. G., sharpening tools, Washburn, W. H., lumber, To transfer to Incidentals,	3.60 17.15 882.15 8.11	\$8,000.00

POLICE STATION AND LOT.

(BOWDITCH AND WELD STS.)

Slack, Robert H., architect, 1887, Jan. 5. To balance,	\$9,000.00 202.80	\$9,202.80 4,797.20 \$14,000.00
Cr. By special appropriation,	· .	\$14,000.00
Cr. 1887, Jan. 5. By balance,		\$4,797.20

LAUNDRY AT ALMS-HOUSE.

DR.

Bliss, M. H., carpentry,	\$346.35	
Brownell, Ashley & Co., iron-work,	11.15	
Gifford, T. J. & Co., plumbing, &c.,	243.96	
Greene & Wood, lumber,	63.37	
Jenney & Buffington, masonry,	482.77	
Paisler, C. S., brick, lime and cement,	352.80	
Perkins & Staples, roofing,	114.18	
Sullings, Kingman & Co., hardware,	95.05	
Tillinghast & Terry, lumber,	315.85	
Tripp, S. A., ventilators and pipes,	35.29	
Washburn, W. H., lumber, &c.,	144.03	\$2,204.80

CR.

By transfer from	Lighting the Streets,	\$2,000.00	
6.6	Unappropriated Funds,	204.80	\$2,204.80

SEWERS—GENERAL ACCOUNT.

Pay-roils, labor,	\$1,578.84
Ashley & Boyle, sharpening tools,	2.72
Caswell, N. H., sharpening tools,	1.60
Caswell, O. F., sharpening tools,	10.57
DeWolf & Vincent, tools,	34.81
Drake, A. B., grades,	15.00
Duff, David & Son, teaming,	71.75
Durfee, E. M., sharpening tools,	1.00
Edson Manufacturing Co., hose, &c.,	49.31
Fichtenmayer & Flynn, tools, &c.,	15.90
Footman, J. W., sharpening tools,	1.55
Forbes, J. R., repairing tool cart,	18.20
Grinnell, Edmund, eastings,	190.76
Hamlin, J. B., plank,	142.50
Hamlin, S. B., plank,	377.37
Handy, Jonathan, iron,	3.33
Hastings, George, dredging,	1,835.00
King, W. F., sharpening tools,	5.51
Look, J. W., earpentry,	60.26
Lowe, S. C., tools,	73.94
Luce, F. C., labor,	4.00
N. B. Cordage Co., rope,	15.03
N. B. Water Works, pipe,	60.00
Old Colony R. R. Co., freight,	1.54
Paine, S. S. & Bro., pipe, cement, &c.,	43.87
Paisler, C. S., pipe, cement and brick,	2,691.13
Palmer, A. R., rubber boots,	17.50
Richards, George D., pails,	2.00
Roatch & Leary, tools,	21.00
Rogers, A., stone,	24.00
Sawyer, S. P., pails,	2.99
Sherman, W. D., sharpening tools,	2.79
Skiff, S. B., tools and labor,	139.97
Springer, A. R., sharpening tools,	3.17
Staples Bros., grates and covers,	34.20
Street Department, stock, labor and teaming,	4,501.39
Sullings, Kingman & Co., shovels,	10.50
Sylvia, A. A., sharpening tools,	6.42
Ward, M. J., hose,	87.50
Washburn, W. H., lumber,	4.89

\$972.72

2.10 94.25	\$12,260.16
\$2,400.00	
6,366.46	
2,036.91	\$10,803.37
its for	
	1,456.79
	\$12,260.16
	\$2,400.00 6,366.46

SEWERS—AUSTIN STREET, NO. 1.

DR.

Pay-rolls, labor,	\$395.50
Drake, A. B., assessment plan,	13.00
General Sewer Account, pipe,	324.00
Paisler, C. S., cement and brick,	6.08
Street Department, teaming,	20.10 \$758.68
Cr.	
By special appropriations,	\$758.68

SEWERS—AUSTIN STREET, No. 2.

DR.

Pay-rolls, labor,	\$525.96	
Drake, A. B., grade and plans,	13.00	
General Sewers, pipe,	388.12	
Paisler, C. S., cement,	3.35	
Springer, A. R., sharpening tools,	30.61	
Street Department, stock and teaming,	11.68	\$972.72
		
Cr.		

By special appropriations,

SEWERS-BLACKMER STREET.

DR.

Pay-rolls, labor,	\$102.39	
Drake, A. B., grade and plan,	10.00	
General Sewers, pipe and cement,	70.00	
Paisler, C. S., pipe,	25.92	
Springer, A. R., sharpening tools,	2.68	
Street Department, stock and teaming,	6.00	\$216.99
		
C _R .		
By special appropriations,		\$216.99

SEWERS—CEDAR STREET, No. 3.

Pay-roll, labor,	\$290.37	
Drake, A. B., grade and plan,	14.00	
General Sewers, pipe,	159.12	
Paisler, C. S., brick and cement,	3.75	
Springer, A. R., sharpening tools,	12.67	
Street Department, stock and teaming,	168.52	\$648.43
To transfer to Incidentals,		163.82
		\$812.25
Cr.		
By special appropriations,	\$648.43	
Street Department,	163.82	\$812.25

SEWERS—COUNTY STREET.

DR.

Pay-roll, labor, Drake, A. B., grade and plan, N. B. Gas Light Co., pipe and labor, Private Co. Secretary bridge.	\$381.16 21.00 16.30	
Paisler, C. S., cement and brick, Sylvia, A. A., sharpening tools,	6.02 39.93	\$464.41
Cr.		
By special appropriations, Transfer from Unappropriated Funds,	\$400.00 64.41	\$464.41

SEWERS—DIVISION STREET.

Pay-rolls, labor,	\$874.63	
Caswell, O. F., sharpening tools,	41.77	
Drake, A. B., grade and plan,	19.50	
Duff, David & Son, teaming,	10.50	
Eggers, S., powder and fuse,	16.00	
Paisler, C. S., pipe, cement, &c.,	680.77	
Sylvia, A. A., sharpening tools,	37.84	\$1,681.01
	<u>—</u>	
$C_{\mathrm{R}}.$		
By special appropriations,	\$761.51	
Transfer from Street Department,	729.33	
" Unappropriated Funds,	190.17	\$1,681.01

SEWERS-HAWTHORN STREET, No. 2.

DR.

Pay-rolls, labor,	\$1,089.67	
Drake, A. B., grade and plan,	24.00	
General Sewers, pipe and brick,	225.71	
Paisler, C. S., pipe, cement, &c.,	150.00	
Street Department, stock and teaming,	27.50	
Sylvia, A. A., sharpening tools,	32.91	
Tillinghast & Terry, lumber,	5.30	\$1,555.09

CR.

By special appropriations,

\$1,555.09

SEWERS-LINDSEY STREET, No. 2.

DR.

Drake, A. B., plan and grade,	\$13.00	
King, Wm. F., sharpening tools,	3.92	
Street Department, teaming,	13.59	\$30.51

CR.

By special appropriation,

\$30.51

SEWERS—ROBESON STREET, No. 2.

DR.

Pay-rolls, labor,	\$420.25	
Drake, A. B., grade and plan,	17.00	
Durfee, E. M., sharpening tools,	2.15	
Paisler, C. S., cement,	6.00	
Street Department, pipe and teaming,	334.13	\$779.53

CR.

By special appropriations,

\$779.53

SEWERS-ROCKLAND STREET AND CONNEC-TIONS.

Pay-rolls, labor,	\$19,692.17
American Supply Co., pails,	3.00
Anthony, E. & Sons, advertising,	14.62
Borden, C. M., wood,	1.45
Caswell, N. H., sharpening tools,	40.95
Caswell, O. F., picks and labor,	261.68
Coggeshall, C. F., sand,	390.92
Corson, T. S., teaming,	13.03
DeWolf & Vincent, hardware and tools,	25.77
Drake, A. B., surveying,	160.50
Duff, David & Son, teaming,	5.35
Eggers, S., powder and fuse,	50.50
Eldredge, Abram, 2d, care of lights,	1.32
Forbes, J. R., picks,	10.50
Gammons, G. F. W., estate, teaming,	.50
Greene & Wood, lumber,	176.96
Grinnell, Edmund, sewer tops,	138.48
Hillman, Jethro, carpentry,	121.15
Leonard, Dr. M. H., professional services,	6.00
Lowe, S. C., shovels, hardware, &c.,	281.13
Luce, F. C., iron work,	37.72
McCullough, John, canvas,	15.70
Mercury Publishing Co., advertising,	16.00
Paisler, C. S., brick, cement, &c.,	9,377.98
Parker, Fred'k, powder and fuse,	33.50
Penney, E. F., pails, pipe, &c.,	82.67
Potter, E. L., buckets,	1.26
Richards, George D., pails and brooms,	5.70
Roatch & Leary, sharpening tools,	68.45
Sawyer, S. P., pails,	3.00
Sheehan, Timothy, teaming,	22.40
Skiff, S. B., iron work,	32.02
Street Department, stock and teaming,	1,299.82
Sullings, Kingman & Co., tools,	65.20
Swift, Jirch, rent of barn,	10.00
Sylvia, A. A., tools and sharpening,	340.83
Taber, C. G., sharpening tools,	35.01
Tillinghast & Terry, lumber,	1.58

Washburn, W. H., lumber,	223.53	
West, W. R., setting glass,	10.70	\$33,079.05

CR.

By special appropriations,	\$32,689.09	
Transfer from Unappropriated Funds,	389.96	\$33,079.05

SEWERS—SOUTH SECOND STREET.

DR.

Pay-rolls, labor,	\$112.28	
Drake, A. B., grade and plan,	13.00	
General Sewers, pipe,	75.60	
Paisler, C. S., cement,	1.60	
Street Department, teaming, &c.,	7.70	\$210.18

CR.

By special appropriations,		\$210.18

SEWERS—UNION STREET.

DR.

Pay-rolls, labor,	\$149.45	
Drake, A. B., grade and plan,	11.00	
General Sewers, pipe and brick,	164.24	
Paisler, C. S., cement,	1.60	
Sherman, W. D., sharpening tools,	3.38	
Street Department, teaming,	5.15	\$334.82

CR.

By special appropriations,	\$334.83
by special appropriations,	\$666

Paine, N. L.,

Palmer, A. R., shoes,

TEMPORARY LOAN.

	Dr.		
To paid loans,		\$392,000.00	
1887, Jan. 5. To balance.		77,000.00	\$469,000.00
	Cr.		
1000 Ton * Doubleman	CR.	\$33.000.00	
1886, Jan. 5. By balance,		\$22,000.00	\$100 000 00
Sundry loans,		417,000.00	\$469,000.00
	CR.		
1887, Jan. 5. By balance,			\$77,000.00
TRUA	NT SCHOO	L.	
	Dr.		
Anthony, E. & Sons, Standard,		\$6.00	
Bliss & Nye, brooms,		2.26	
Borden, C. M., wood,		5.25	
Chase, Nellie, teacher,		461.25	
Corson, T. S., coal,		37.28	
Delano, Gustavus, labor,		7.60	
Donaghy, Thomas, shoes,		8.70	
Eddy, George M. & Co., cloth,		5.75	
Greenwood, Levi, services,		104.00	
Hart & Akin, glass,		1.14	
70			

Poor Department, board of scholars, 1,082.39	
Russell, D. J., teacher, 62.50	
Tripp, S. A., tin pails, 4.70	
Underwood, J. A., masonry, 5.98	
Wing, J. & W. R. & Co., elothing, 21.77	
Wood, Brightman & Co., stoves, 17.53	\$1,924.70
To transfer to Incidentals,	575.30

	\$2,500.00

70.50

20.10

CR.

By appropriation, \$2,500.00

PUBLIC SCHOOLS—INCIDENTALS.

DR.

DR.		
SALARIES:		
Almy, Emma M., clerk,	\$500.00	
Coggeshall, R. C. P., evening drawing school,	150.00	
Drake, A. B., asst. in evening drawing school,	120.00	
Harrington, H. F., superintendent and sec'y,	2,000.00	
Paine, N. L., truant officer,	800.00	\$3,570.00
PAY-ROLLS:		
Janitors,	\$7,806.21	
Sweepers and bell-ringers,	138,40	7,944.61
FUEL:		
Ashley, Mrs. M. P.,	\$39.25	
Borden, Horace,	1.20	
Cobb, George A.,	3.35	
Corson, T. S.,	2,760.94	
Hart & Akin,	12.20	
Holmes, A. W.,	7.35	
Notter, John,	5.00	
Pratt, Winslow,	111.51	2,940.80
REPAIRS OF SCHOOL HOUSES:		
Almy & Hitch,	\$4.00	
Almy, G. L.,	3.30	
Brownell, B. S.,	10.00	
Carson, C. J. R.,	25.00	
Cobb, Geo. A.,	9.60	
Coggeshall, Maxfield & Co.,	2.55	
Dantsizen, C.,	19.50	
Delano, Gustavus,	87.75	
Francis, Ezra,	10.00	
Gifford's Brass Foundry,	4.69	
Gifford, T. J. & Co.,	1.58	
Greene & Wood,	6.95	
Hammond, F. W.,	68.58	
Hillman, Jethro,	25.82	
Holmes, D. W.,	56. 09	
Jenney & Buffington,	54.25	

\$14,455.41

Amount carried forward,

Amount brought forward,		\$14,455.41
Lewis, B. F.,	86.86	
Look, J. W.,	13.04	
Lumbert, John,	2.05	
Maxfield & Pierce,	1.20	
Maxfield, Wm. & Son,	33.25	
Peirce, A. B.,	29.00	
Phillips, H. T.,	12.00	
Russell, D. J.,	2.11	
Sawyer, G. T.,	57.19	
Sherman, C. R. & Son,	14.70	
Tillinghast & Terry,	2.82	
Underwood, C. H.,	30.42	
West, W. R.,	3.50	
Wood, Brightman & Co.,	8.31	686.11
BOOKS AND STATIONERY:		
Appleton, D. & Co.,	\$26.27	
Boston School Supply Co.,	12.96	
Clark & Maynard,	45.00	
Cowperthwaite & Co.,	148.30	
Cyclostyle Co.,	1.60	
Dews, Edwin,	5.75	
Ginn & Co.,	42.45	
Harper & Bros.,	458.64	
Heath, D. C. & Co.,	23.33	
Holden Book Cover Co.,	228.32	
Holt, Henry & Co.,	29.52	
Hume, Harrison,	127.00	
Hutchinson, H. S. & Co.,	90.41	
Kane, D. J. & Co.,	89.95	
Kenffee & Esser,	102.71	
Knight, Adams & Co.,	7.07	
0 ,		
Lawton, J. M., Jr.,	10.08	
Leach, Shewell & Sanborn,	10.80	
Lee & Shepard.	26.30	
Perry, George S.,	1,131.25	
Potter, Ainsworth & Co.,	50.32	
Prang Educational Co.,	78.45	
Schoenhof, Carl,	9.00	
Sherman, C. R. & Son.	1.75	
Thompson, Brown & Co.,	257.12	
Ware, William & Co.,	275.05	
Whiting, Chas. H. & Co.,	28.04	3,317.44
Amount carried forward,		\$18,458.96

Amount brought forward,	\$18,458.96
REPAIRS OF HEATING APPARATUS:	
Chase, Ezra B.,	86.00
Cobb, George A.,	9.00
, ,	58.86
6 /	73.90
	6.84
	9.60
	48.66 812.86
**/	
SUPPLIES:	
Almy & Hitch, curtains, &c.,	\$8.36
Baylies, J. B., book ease,	20.00
Bennett, R. G., furniture,	14.75
Bennett, Samuel, brooms, &c.,	5.90
	3.36
Bliss & Nye, mats, dusters, &c.,	78.57
Braley, J. W., soap,	1.35
Briggs & Lawrence, chairs,	4.55
Carson, C. J. R., desk covers,	28.00
Corish, John, oil, &c.,	1.90
Cranston, O. W., window shades,	5.50
DeWolf & Vincent, hardware,	26.42
Douglass, F. M., chemicals,	10.40
Eddy, Geo. M. & Co., tape,	.93
Eimer & Amend, sundries,	36.90
Freeman, George H., ink,	15.50
Gifford's Brass Foundry, pipe, &c.,	33.81
Hart & Akin, shellae,	14.25
Haskins, O. & Sons,	35.50
Hatch, George E., ash barrel,	3.50
Hayden, Wm. G., dusters, brooms, &c.,	33.46
Hayes, N. P., hardware,	5.61
	4.80
Hazard, J. B. & Son, blackboards,	77.10
Hopkins, John, wire,	6.00
Hurll, C. W., clocks,	9.50
Jenney, P. P. & Son, snow shovel,	.90
Kirby, Chas. L., block,	.50
	4.55
Lawton, J. M., Jr., block,	2.60
Look, J. W., blackboard,	13.42

Amount carried forward,

\$20,635.94

Amount brought forward,		\$19,271.82
N. B. Cordage Co., rope,	.86	
N. B. Boiler & Machine Co., radiators, &c.,	56.48	
N. B. Gas Light Co., globes,	1.05	
Purrington & Brown, sundries,	195.50	
Richards, George D., pails, brooms, mats, &c.,	62.71	
Russell, D. J., tables,	61.82	
Sherman, C. R. & Son, keys, thermometers, &c.,	29.84	
Sherman, I. C. & Son, "Pearline,"	1.68	
Slocum, F. R., furniture,	4.75	
Smith, Henry, sundries,	11.45	
Sullings, Kingman & Co., hardware,	23.71	
Swan, W. D., spades,	1.50	
Tripp, L. G., sundries,	4.31	
Wadsworth, Howland & Co., paints,	38.50	
Whitcomb, A. G., furniture,	304.50	
Whiting, E. B. & Co., towels,	9.50	
Whittemore, M. F., soap,	1.61	
Wing, C. F., mats,	13.71	
Wood, Brightman & Co., lantern,	2.75	1,364.12
MISCELLANEOUS:		
Allen's Express,	\$1.00	
Allen Street M. E. Church, use of vestry,	52.50	
Almy & Hitch, awning,	16.50	
Almy, Emma M., paid for books,	55.63	
American Bank Note Co., diplomas,	45.00	
Andress, B., carting,	.35	
Anthony, E. & Sons, printing, &c.,	271.95	
Ashley, Mary, cleaning,	35.00	
Barbour, John R., labor,	14.50	
Bill Posting,	6.00	
Boston Daily Advertiser,	3.75	
Briggs & Lawrence, use of chairs,	29.05	
Brownell, H. M., earriage hire,	1.50	
Carson, C. J. R., washing towels, &c.,	26.78	
Cobb, George A., cleaning,	10.00	
Corish, John, labor,	1.65	
Dammon, Geo. K., washing towels,	19.00	
DeMoranville, D. H., earting,	1.00	
Dews, Edwin, papers,	37.40	
Diman, F. L., use of piano,	20.00	
Edison Electric Illuminating Co.,	118.56	

Amount brought forward,		\$20,635.94
Eldridge, John, expenses,	3.85	
Fichtenmayer & Flynn, labor,	1.05	
Footman, J. W., iron and labor,	2.28	
Gammons, E. H., professional services,	21.00	
Gifford Brass Foundry, labor,	4.81	
Gomley, John A., carting,	4.00	
Gray, Charles A., freight and earting,	28.99	
Hadley, F. R., oxalic acid,	1.00	
Harrington, H. F., expenses,	28.10	
Haskell & Tripp, ribbon,	21.55	
Haskell, E. S., flowers,	5.50	
Hatch & Co., express,	16.50	
Hathaway, Geo. B., writing diplomas,	20.00	
Hathaway, Nathaniel, analysis,	5.00	
Hillman, Jethro, carpentry,	14.28	
Hines, H. S., washing towels,	3.12	
Hurll, C. W., repairing clocks,	13.25	
Jenkins, B. S., blackboard,	3.25	
Jenney, P. P. & Son, labor,	6.69	
Kelley, George S., repairing clocks,	2.62	
Kelley, W. L., repairing clocks,	4.00	
Mackie, James, canvas,	3.00	
Mercury Pub. Co., advertising and printing,	32.74	
Moulton, A. G., earting,	19.50	
Netcher, George F., carting,	.25	
N. B. Electric Light Co.,	61.50	
N. B. Gas Light Co.,	262.09	
Old Colony R. R. Co., freight,	7.39	
Paine, N. L., expenses,	19.75	
Paine, S. S. & Bro., disinfectant,	3.92	
Peirce, William, labor,	7.00	
Perry, S. F. & Son, carriage hire,	2.00	
Phillips, Henry T., labor,	3.25	
Pulsifer, R. M. & Co., Herald,	9.00	
Russell, D. J., carpentry,	29.81	
Sherman, Ruth S., covering books,	2.90	
Sherman, W. H., carriage hire,	34.75	
Shields, James, cleaning,	6.50	
Skiff, S. B., iron work,	2.00	
Slocum, F. R., use of chairs,	9.60	
Smith, Henry, labor,	5.40	
So. Mass. Telephone Co.,	74.00	
*		

Amount brought forward,		\$20,635.94
Taber, W. H., labor,	24.80	
Town of Freetown, tuition,	24.00	
Tripp, L. G., sundries,	3.90	
Washburn, F. A., expenses,	4.81	
Wilbur, A. G., repairing clock,	.75	
Wood, Brightman & Co., plumbing,	4.75	1,637.32
		\$22,273.26
Cr.		
By appropriation,	\$20,000.00	
Transfer from Unappropriated Funds, Amounts returned,	2,266.66	\$22,266.66 6.60
		\$22,273.26

NEW BEDFORD SCHOOL COMMITTEE.

(HOWLAND FUND.)

Adams, C. F., shades,	\$31.45
Almy & Hitch, hanging maps,	21.68
Almy, Emma M., paid for covering books,	71.53
Ambrose, F. M. & Co., books,	22.00
Anthony, E. & Sons, printing,	11.17
Appleton, D. & Co., drawings,	8.50
Boden, E., Jr., organs,	220.00
Boston School Supply Co., books,	19.00
Butler, E. H. & Co., books, &c.,	69.17
Cassell & Co., books,	24.30
Central Union Association, pails,	4.50
Chase, W. I., newspaper,	11.00
Corson, T. S., earting,	.40
Cowperthwaite & Co., books,	31.03
Cushman Bros. & Co., map rollers,	41.73
DeWolf & Vincent, scales,	3.00
Dews, Edwin, Youth's Companion,	14.00
Diman, F. L., music,	13.86
Ditson, Oliver & Co., music books,	22.50
Educational Publishing Co., books,	15.00
Eimer & Amend, chemicals,	314.21
Eldridge, John, Jr.,	3.67
Fairchild, E. B., books,	72.00
Frost, George & Co., files,	.21
Gammons, G. F. W., est., carting,	3.00
Ginn & Co., books,	84.34
Gray, Chas. A., carting,	4.00
Harrington, H. F., paid for books,	25.70
Hatch & Co., expressage,	13.20
Hazzard, J. B. & Son, painting,	2.50
Holt, Henry & Co., books,	11.40
Hume, Harrison, books,	108.50
Hutchinson, H. S. & Co., books, &c.,	282.15
Ivison, Blakeman, Taylor & Co., books,	52.50
Jenkins, W. R., books,	12.00
Kane, D. J. & Bro., binding,	34.95
Kellogg, E. L. & Co., periodicals,	9.75
Knowlton, D. H. & Co., books,	2.40
Lawton, J. M., Jr., books,	6.46
Leach, Shewell & Sanborn, books,	20.00

Lee & Shepard, books,	46.67	
Look, J. W., carpentry,	48.84	
McAllister, T. H., stereopticons,	19.50	
McCabe, Mrs. B. F., organs,	195.00	
Mercury Pub. Co., printing,	127.25	
Milton Bradley & Co., supplies,	127.20	
Old Colony R. R. Co., freight,	1.02	
Paine, N. L., labor, sewing school,	11.50	
Paine, S. S. & Bro., clay,	1.00	
Peirce, George, care of instruments,	262.00	
Perry, Geo. S., maps, globes, &c.,	302.05	
Perry Mason & Co., papers,	39.00	
Piper, A. D., labor,	2.00	
Prang Educational Co., books,	389.76	
Richmond, C. H., cotton, &c.,	3.00	
Sherman, C. R. & Son, sundries,	21.40	
Sherman, Ruth S., covering books,	1.60	
Sowle, F. A., boards,	2.00	
Spare, J. V., cloth,	1.80	•
Stockin, A. C., books,	16.80	
Sullings, Kingman & Co., seissors,	6.00	
Tripp, George H., mineral ore,	15.00	
Tripp, S. A., tin pans, &c.,	8.20	
Ware, William & Co., books,	91.67	
Whiting, Chas. H., books,		
	32.92	40 000 00
Whiting, E. B. & Co., cotton, &c.,	6.48	\$3,383.82
1887, Jan. 5. To balance,		2,299.89
•		\$5,683.71
Cr.		
1886, Jan. 5. By balance, \$	2,680.41	
Income from educational be-		
quest of Sylvia Ann Howland,	3,000.00	
Λ mounts returned,	3.30	\$5,683.71
Cr.		
1887, Jan. 5. By balance,		\$2,299.89

TRUST FUNDS.

CR.

By Sylvia	ANN E	TOWLAND	FREE	Public	LIBRARY	Fund.

One half of the bequest of Sylvia Ann Howland for the support of Liberal Education and the Free Public Library,

\$50,000.00

By Sylvia Ann Howland Educational Fund:

One half of the bequest of Sylvia Ann Howland for the support of Liberal Education and the Free Public Library,

50,000.00

BY GEORGE HOWLAND, JR., FUND:

Donation to Free Public Library,

1,600.00

By Charles W. Morgan Fund:

Bequest to Free Public Library,

1,000.00

BY OLIVER CROCKER FUND:

Bequest to Free Public Library,

1.000.00

By James B. Congdon Fund:

Donation to Free Public Library,

500.00

\$104,100.00

BY CEMETERY FUND DEPOSITED IN THE TREASURY BY:

Allen, Charles F.,	\$25.00
Backman, George W.,	50.00
Barker, John P.,	50.00
Bierstadt, Edward,	100.00
Blackmer, William, Estate of,	50.00
Blossom, E. R.,	15.00
Bourne, Jonathan,	100.00
Buchanan, Thomas,	100.00
Clark, B.,	60.00
Colesworthy, Emeline,	15.00
Congdon, S. and E.,	100.00
Cook, Julia A.,	30.00

Amount carried forward,

\$104,100.00

Ar	nount brought forward,	\$	104,100.00
	Cornell, William, Jr.,	25.00	
	Crapo, Sarah A., "Rural,"	50,00	
	Crapo, Sárah A., "Oak Grove,"	50.00	
	Cross, Sylvia G.,	150.00	
	Davis, Nicholas,	50.00	
	Durfee, Thomas,	50.00	
	Dyer, Asa,	50.00	
	Gardner, Edmund,	100.00	
	Greene, L. P.,	100.00	
	Harris, William, Trustee of will of,	100.00	
	Hill, Phebe,	50.00	
	Hitch, Charles, Estate of,	200.00	
	Howe, Moses G.,	125.00	
	Howland, Hester A.,	100.00	
	Howland, Jonathan,	150.00	
	Howland, Jonathan,	40.00	
	Johnson, E. R., Estate of,	300.00	
	Menage, Henry G.,	50.00	
	McKenzie, Alexander,	60.00	
	Moore, Ann M.,	25.00	
	Murdock, Ann E.,	44.93	
	Oliver, H. G.,	75.00	
	Peirce, David R.,	50.00	
	Peirce, Lloyd N.,	100.00	
	Russell, Wing,	50.00	
	Sherman, Lucy T.,	100.00	
	Sherman, Wing, Estate of,	100.00	
	Spencer, C. L.,	100.00	
	Spooner, Paul, for,	100.00	
	Swain, Oliver,	50.00	
	Sweet, Betsey B.,	25.00	
	Taber, Lucy B.,	100.00	
	Thomas, Henry F., Estate of,	150.00	
	Tobey, Franklin,	70.00	
	Tompkins, Eliza,	50.00	
	Ward, S. J.,	100.00	
	West, B. H.,	50.00	
	Wilbur, Mary A.,	50.00	
	Wilson, George,	100.00	
	Wood, Borden,	50,00	
	Wordell, Brayton B.,	50.00	4,084.93

\$108,184.93

UNAPPROPRIATED FUNDS.

To transfers to:		
Appropriations, Special, 1885,	\$2,055.59	
Fire Department,	2,150.76	
Laundry at Alms-house,	204.80	
Police Department,	5,177.44	
Poor Department,	5,511.87	
Public Debt,	692.08	
Public Schools, Incidentals,	2,266.66	
" Pay of Teachers,	3,900.00	
" Repairs of Buildings,	6.86	
Repairs of City Property,	180.21	
Sewers, General Account,	2,036.91	
" County Street,	64.41	
" Division Street,	190.17	
" Rockland Street and connections,	389.96	\$24,827.72
Appropriations, Special, 1886,		16,589.24
		\$41,416.96
Cr.		
By amounts received from:		
State Treasurer:		
Corporation Taxes,	\$252.43	
National Bank Taxes,	6,558.04	
Ships in foreign trade,	3,446.38	
Contagious diseases,	35.40	\$10,292.25
Licenses:		^ /
Liquor (net),	\$15,187.50	
Others,	1,404.00	16,591.50
Sewer Taxes,	\$7,382.61	
Betterments,	528.01	7,910.62
Milk Inspector's fees,	\$82.00	
Sealer's fees,	68.27	
Interest,	4,523.97	
Rents,	1,198.00	
Rolls, uncalled for,	74.34	
Entering sewers,	270.00	
Sale of old material,	2.83	
School Committee, tuition,	403.18	6,622.59
		\$41,416.96

BONDS OF THE CITY OF NEW BEDFORD.

TITLES, RATES, AMOUNTS DUE ANNUALLY, AND TOTAL.

	Sewer Bonds, 4s.	Old Bonds, 5s.	Water Bonds, 6s.	Water Bonds, 7s.	Bridge, etc., 6s.	City Impvt. Bonds, 6s.	Totals.
1887,	\$10,000		\$20,000	\$10,000	\$5,000		\$45,000
1888,	10,000		20,000	10,000	5,000		45,000
1889,	10,000		20,000	10,000	5,000		45,000
1890,	10,000		20,000	10,000	5,000		45,000
1891,	10,000		20,000	10,000		\$10,000 R.	50,000
1892,	Water		20,000	10,000		10,000 C.	40,000
1893,	Bonds, 4s.		20,000	<i>[</i>	C4. T	5,000 R.	33,000
			,	}	City Imp. Bds. 3½s.	8,000 C.	50,000
1894,	100,000		20,000			10,000 C.	130,000
1895,			20,000		80,000	10,000 C.	110,000
1896,			20,000		25,000	10,000 C.	55,000
1897,		******	20,000			10,000 R.	30,000
1898,		Water Bonds, 5s.	20,000			10,000 C.	30,000
1899,			20,000	10000		10,000 C.	30,000
1900,		\$20,000		10,000		10,000 R.	40,000
1901,		20,000		10,000		10,000 R.	40,000
1902,		20,000		10,000		10,000 R.	40,000
1903,		20,000		10,000	1	5,000 C.	40,000
1004				. '	(5,000 R.	_ ′
1904,	Sewer 358	20,000	20,000	10,000		10,000 R.	40,000
1905,				10,000	1	10,000 R.	40,000
1906,	60,000		20,000	10,000		10,000 R.	100,000
1907, 1908,			20,000	10,000		10,000 R.	40,000
1908,			20,000	10,000		10,000 R.	40,000
1909,			20,000	10,000	{	5,000 C. 5,000 R.	40,000
1910,					(30,000 C.	30,000

Total, \$1,178,000

Amount of Water Bonds,	7s,		\$160,000	
6.6	5s,	,	100,000	
4.4	6s,		360,000	-
66	4s,		100,000	
Bridge, etc., 6	s,		. 20,000	
Sewer Bonds,	4s,		50,000	
Sewer Bonds,	$3\frac{1}{2}s$,	·	60,000	
City Improver	nent Bo	nds, 6s,	223,000	
46	4.6	34s.	105,000	\$1,178,000

INTEREST AS PAYABLE YEARLY.

					TOTALS.
	On \$160,000 V	Water Bonds, at	7 per cent.,	\$11,200	
	100,000		5 "	5,000	
	360,000		6 "	21,600	
	100,000		± .	4,000	
1887.		City Improvemen	it Bonas, at	12 220	
1001.		6 per cent., City Improvemer	t Ronds at	13,380	
		b per cent.,	it Donas, at	3,675	
		Bridge Bonds, at	6 per cent	1,200	
			4 "	2,000	
	60,000 S	Sewer Bonds,	31 "	2,100	\$64,155
	(On \$150,000 V	Water Bonds, at	7 per cent	\$10,500	
	100,000	66 66	5 "	5,000	
	340,000		6 "	20,400	
	100,000		4 "	4,000	
1000		City Improvemen	it Bonds, at	10.900	
1888.		per cent.,	t Ronda et	13,380	
		City Improvemer & per cent.,	n Donus, at	. 3,675	
		Bridge Bonds, at	6 per cent	900	
		Sewer Bonds,		1,600	
		Sewer Bonds,		2,100	61,555
	COn \$140,000 V	Water Bonds, at	7 ner cent	\$9,800	
	100,000		5	5,000	
	320,000		6 66	19,200	
	100,000		4 "	4,000	
1000	223,000 €	city Improvemen	it Bonds, at	10.000	
1889.	105,000,0	6 per cent.,	t Danda at	13,380	
		Dity Improvemer Baper cent.,	n bonus, at	3,675	
	10.000 F	Bridge Bonds, at	6 per cent	600	
	30,000 S	Sewer Bonds,	4 "	1,200	
			$3\frac{1}{2}$. "	2,100	58,955
	COn \$130,000 V	Water Bonds, at	7 per cent	\$9,100	
	100,000		5 "	5,000	
	300,000		6 "	18,000	
	100,000		1. "	4,000	
7,000		City Improvemen	it Bonds, at	10.000	
1890.		6 per cent., City Improvemer	t Ronds at	13,380	
		3½ per cent.,	n Donas, at	3,675	
		Bridge Bonds, at	6 per cent	300	
			4 66	800	
	60,000 S	Sewer Bonds,	$3\frac{1}{2}$ "	2,100	56,355
	(On \$120,000 V	Vater Bonds, at ?	7 per cent	\$8,400	
	100,000	- ee - ee - E	5 ."	5,000	
	280,000	"		16,800	
	100,000	Citar Transmorrom		4,000	
1891.	223,000 (City Improvemen	n Bonds, at	19 990	
*	105,000 0	6 per cent., City Improvemen	t Bonds, at	13,380	
	200,000	$3\frac{1}{2}$ per cent.,		3,675	
	10,000 8	Sewer Bonds, at	4 per cent.,	400	
	60,000 S	Sewer Bonds,	$3\frac{1}{2}$ "	2,100	53,755

THE FOLLOWING TABLE EXHIBITS THE TOTAL AMOUNT OF THE BONDED DEBT OF THIS CITY; THE AMOUNT OF BONDS PAYABLE EACH YEAR; THE AMOUNT DUE EACH YEAR FOR INTEREST; AND THE AGGREGATE OF BOTH PRINCIPAL AND INTEREST TO BE PAID IN LIQUIDATION.

Years.	Bonds.	Interest.	Am	ount.
1887,	\$45,000	\$64,155	\$109	.155
1888,	45,000	61,555		555
1889,	45,000	58,955	103	955
1890,	45,000	56,355	101.	355
1891,	50,000	53,755	103	,755
1892,	40,000	50,855		,855
1893,	33,000	47,355		,355
1894,	130,000	46,375		,375
1895,	110,000	40,575		,575
1896,	55,000	35,975		,975
1897,	30,000	33,300		,200
1898,	30,000	31,500		,500
1899,	30,000	29,700		,700
1900,	40,000	27,900		,900
1901,	40,000	25,600		,600
1902,	40,000	23,300		,300
1903,	40,000	21,000		,000 ,700
1904,	40,000 40,000	18,700 16,400		,400
1905, 1906,	100,000	13,900		,900
1907,	40,000	9,300 6,800 4,300		,300
1908,	40,000			,800
1909,	40,000			300
1910,	30,000	1,800		,800
	\$1,178,000	\$779,410	\$1,957	,410 -
BONDS PAYAB	BLE IN 1887:			
Bridge, etc	e., Bonds,		\$5,000	
Water Bor	nds. 7s.		10,000	
Water Bor	, ,		20,000	
			10,000	\$45,000
Sewer Bor			10,000	\$40,000
	ABLE IN 1887:		# AW ** **	
On \$720,00	00 Water Bonds,		\$41,800	
223,00	00 City Improveme	nt Bonds,	13,380	
80,00	00 City Improveme	nt Bonds, 1885,	2,800	
	00 City Improveme		875	
,	00 Sewer Bonds,	210 20 11000 9 0 209	4,100	
	,	. 1		01100
20,00	00 Bridge, etc., Bor	nas,	1,200	64,155
				\$109,155
Trust Funds (\$104,100 at 6 per ce	ent.),		6,246
	Total,			\$115,401

THE FOLLOWING TABLE SHOWS THE AMOUNT OF TAXES LEVIED IN THIS CITY SINCE 1866, AND THE RATE PER THOUSAND, FOR STATE, COUNTY, AND CITY PURPOSES; ALSO THE NUMBER OF POLLS.

Year.	Valuation of Real Estate.	Valuation of Personal Property.	State Tax.	County Tax.	City Tax.	Overlay.	No. of Polls.	Rate of Tax.
	\$8.268.500	\$13.740.000.00	\$98,850	\$20,434.95	\$200,000	\$9,136.30	1,647	\$14.50
	8.288,100	13,508,100.00	39,540	21,083.67	230,000	13,633.03	5,004	13.50
	8,277,900	14,652,100.00	49,425	19,461.85	287,000	9,340.15	4,906	15.50
	8,774,500	14,221,514.00	49,425	17,840.02	290,000	9,475.20	5,251	15.00
	9,115,600	13,844,651.67	49,425	22,705.48	293,300	12,599.52	5,333	16.00
1872,	10,050,800	13,742,898.00	32,280	18,943.65	356,000	13,181.96	5,577	17.20
-	11,125,700	14,114,364.20	36,315	23,679.57	349,000	11,454,46	5,780	16.20
	11,665,400	13,846,904.95	32,280	27,874.24	354,000	11,005.10	5,930	16.20
	11,946,600	14,428,674.00	32,280	28,415.48	383,000	17,136.07	6,226	17.00
_	12,411,200	14,339,002.00	26,244	23,859.86	387,000	20,251.49	6,651	16.60
	12,609,200	13.524,097.00	21,870	23,859.86	436,200	17,273.46	6,562	18.60
	12,808,700	13,137,011.20	14,580	25,249.76	371,500	17,259.61	6,729	16.00
	12,898,300	12,874,418.00	7,290	25,666.72	386,000	17,497.36	6,891	16.40
	13,138,400	13,137,519.00	21,870	28,377.03	361,250	15,080.89	7,028	15.70
	13,505,400	13,609,922.00	21,870	26,871.30	437,300	16,084.49	7,025	18.00
	14,138,300	13,974,587.00	29,160	25,689.88	434,200	17,605.64	7,340	17.50
	15,109,300	15,180,305.00	25,770	29,468.95	452,400	16,614,41	7,694	16.80
	15,635,900	15,718,182.00	34,360	26,668.72	462,700	13,031.04	8,141	16.60
	16,293,800	15,104,090.00	25,770	27,735.50	457,950	17,028.11	8,349	16.30
	16,778,900	15,416,695.50	27,015	33,883.77	456,300	15,328.18	8,699	16.00

Average rate for 20 years, \$16.28.

AUDITOR'S BALANCE SHEET.

DR.

Water Works (as public property),	\$1,200,000.00
Public Property (other than Water Works),	945,900.00
Sinking Fund Commissioners,	17,162.13
Appropriations, General, 1885,	36,651.27
" 1886,	77,032.14
" Special, 1886,	55,424.19
Com. Mass., ehap. 252,	2,724.50
" " 301,	3,342.15
Real Estate Tax Account,	193.59 \$2,338,429.97
City Treasurer,—balance of eash,	4,050.62

\$2,342,480.59

CR.

Bonds,	81,178,000.00	
Balance of Public Property,	885,062.13	
Trust Funds,	104,100.00	
Cemetery Funds,	4,084.93	
Cemeteries,	77.11	
Com. of Mass., Bank Tax Account,	50,879.95	
Free Public Library, Trustees,	12,191.97	
" Dog Fund,	602.74	
N. B. School Committee,	2,299.89	
N. B. Water Works,	22,590.68	
Police Station and Lot, Bowditch and Weld sts.	4,797.20	
Public Schools, Dog Fund,	793.99	
Temporary Loan,	77,000.00	\$2,342,480.59

CITY OF NEW BEDFORD.
AUDITOR'S OFFICE,

January 5th, 1887.

WILLIAM B. TOPHAM, City Auditor.

CITY OF NEW BEDFORD.

AUDITOR'S OFFICE,
February 26, 1887.

We have examined the foregoing and find it correct.

EDWARD T. PIERCE, WILLIAM A. CHURCH, CHARLES O. BRIGHTMAN, FREDERICK W. MOSHER,

Sub-committee of the Committee on Finance, appointed to examine the books and accounts of the Auditor and Treasurer.

Approved.

EDWARD T. PIERCE,
CHARLES W. COGGESHALL,
STEPHEN D. PEIRCE,
FRANK E. SAWIN,
JOHN A. LEE,

STATEMENT

OF THE

COLLECTOR OF TAXES,

FOR THE

FINANCIAL YEAR ENDING JAN. 3, 1887.

IN BOARD OF ALDERMEN,

Feb. 24, 1887.

Received and ordered printed in the City Documents, and sent down for concurrence.

D. B. LEONARD,
City Clerk.

IN COMMON COUNCIL,

Feb. 24.

Concurred.

WM. A. MACKIE,

Clerk.

STATEMENT OF COLLECTOR OF TAXES.

1886.

CITY OF NEW BEDFORD, Collector's Office, January 3, 1887.

To the City Council:

Gentlemen,—I herewith respectfully present to you my account as collector of taxes, embracing a statement in full of the various transactions in this department, for the financial year ending at this date.

COLLECTOR'S STATEMENT FROM 1882 TO 1885, INCLUSIVE.

Financial Year.	Unpaid, Jan. 4, 1886.	Paid and Remitted.	Unpaid, Jan. 3, 1887
1882,	\$5,466.26	\$122.24	\$5,344.02
1883.	5,981.04	33.81	5,947.23
1884,	7,908.86	1,540.28 $7,349.20$	6,368.58
1885,	16,837.82		9,488.62
	\$36,193.98	\$9,045.53	\$27,148.45

COLLECTOR'S STATEMENT.

TAXES OF 1886.

CHARGES.

Amount of tax bills,		\$532,526.95
State tax,	\$27,015.00	
County tax,	33,883.77	
City tax,	456,300.00	
Overlay,	15,328.18	\$532,526.95

PAYMENTS.

State tax,	\$27,015.00
County tax,	33,883.77
City treasurer,	399,267.86
Discount,	23,948.86
Abatements by assessors,	896.20
Balance unpaid,	47,515.26 \$532,526.95

About $8\frac{92}{100}$ per cent. of the whole tax of 1886 remains unpaid at this date, a larger percentage than ever reported before, due mostly to the non-payment of the National Bank taxes, the Merchants National Bank being the only one to pay the tax assessed upon its shares in 1886.

The amounts due from the several banks may be stated as follows:

Citizens National Bank,	\$9,440.00
First National Bank,	20,320.00
Mechanics National Rank,	13,440.00
National Bank of Commerce,	18,880.00
	\$62,080.00
Amount claimed by commonwealth,	28,084.90
City's portion,	\$33,995.10

Following is a statement of our account with the Commonwealth of Massachusetts, as presented by the state treasurer, Dec. 4, 1886:

DUE THE CITY	. •	
Corporation tax of 1885,		\$38,289.89
Corporation tax of 1886,		43,334.63
DUE THE COMMONW	EAL/PH	\$81,624.51
DUE THE COMMONW Bank taxes of 1885, paid under protest		\$81,624.51
Bank taxes of 1885, paid under protest,	\$39,756.00	\$81,624.51
		\$81,624.51 78,964.85

The sum paid to the city by the Merchants National Bank, amounting to \$11,123.95, being the portion claimed by the state, as appears by the foregoing statement, is still in the hands of the city treasurer, from the fact that the state treasurer refuses to offset the amount by any credits to the city for corporation taxes; it is very evident that a settlement will not be made until the question as to the legality of the bank taxes now pending in the courts is decided upon.

Respectfully submitted.

JAMES H. HATHAWAY, Collector of Taxes.



STATEMENT

OF THE

CITY TREASURER,

FOR THE

Financial Year ending Jan. 3, 1887.



STATEMENT OF THE CITY TREASURER,

JAN. 3, 1887.

CITY OF NEW BEDFORD, TREASURER'S OFFICE, January 3, 1887.

To the City Council:

Gentlemen,—I herewith present to you, as required by the ordinances of the city, my account as city treasurer, for the financial year ending at this date.

Very respectfully.

JAMES H. HATHAWAY, City Treasurer.

PAYMENTS INTO THE TREASURY.

The balance in the treasury at the close of the last financial year, and the receipts during the year ending at this date, are set forth in the statement that follows, viz.:

Balance, January 4, 1886,

\$19,903.98

PAYMENTS INTO THE TREASURY BY THE COLLECTOR OF TAXES.

1882,	\$122,24
1883,	33.81
1884,	1,367.35
1885,	7,175.79
1886,	399,267.86 407,967.05

124 CITY DOCUM	MENT No. 8.	February,
APPROPRIATIONS	, GENERAL, 1884.	
Of State Treasurer, part of tax on shi	ps in foreign trade,	681.77
APPROPRIATIONS	, SPECIAL, 1885.	
From "Sewer Bonds," From "Improvement Bonds,"	\$30,000.00 25,000.00	55,000.00
APPROPRIATIONS	s, SPECIAL, 1886.	
From Sewer Bonds issued Oct. 1, 1886	,	30,000.00
COMMONWEALTH OF	MASSACHUSETTS.	
BANK TAX	ACCOUNT.	
Of Merchants National Bank: Amount due Commonwealth,		11,123.95
COMMONWEALTH OF	MASSACHUSETTS.	
MILITARY AID UNDER CHA).
Of State Treasurer, advances of 1884,	,	
Of State Treasurer, advances of 1885,	3,335.17	E 010 00
Amounts uncalled for,	56.00	7,316.00
COMMONWEALTH OF	MASSACHUSETTS.	
MILITARY AID UNDER CHA	PTER 252, LAW OF 187	9.
Of State Treasurer, one half of the		
to Jan. 1, 1885, Of State Treasurer, one half of the	\$3,377.00 disbursements	
to Jan. 1, 1886,	3,068.25	
Amounts uncalled for,	78.50	6,523.75
СЕМЕТЕ	RIES.	
Received for sale of lots:		
Oak Grove,	\$740.00	
Rural,	1,625.00	2,365.00
CEMETERY	FUNDS.	
Edw. Bierstadt, Rural,	\$100.00	

15.00

50.00

75.00

100.00

50.00

390.00

S. R. Blossom, Oak Grove,

H. G. Oliver, Oak Grove,

B. H. West, Oak Grove,

Samuel L. Ward, Oak Grove,

Asa Dyer, Rural,

FIRE DEPARTMENT.

Received from sundry sources as follows:

Sale of coal,	\$20.35	
Concord Manufacturing Co.,	3.25	
From sundry parties for pumping,	50.00	
Poor Department,	245.99	
N. B. Water Works,	15.10	
C. F. Cushing, amount returned,	4.55	339.24

FREE PUBLIC LIBRARY—TRUSTEES' ACCOUNT.

Income from sundry bequests and gifts, etc.:

Sylvia Ann Howland, bequest,	\$3,000.00	
George Howland, Jr., gift,	96.00	
Charles W. Morgan, bequest,	60.00	
Oliver Crocker, bequest,	60.00	
James B. Congdon, gift,	30.00	
Amount returned, error,	· 4.36	3,250.36

FREE PUBLIC LIBRARY—DOG FUND.

One half of the receipts from the County of Bristol for dog licenses, 782.52

HIGHWAYS AND STREETS.

Receipts from sundry sources as follows:

Acushnet street railroad, labor, &c.,	\$405.51	
Denison Bros., concrete,	. 177.82	
Dirt, stone, etc.,	709.01	
Edison Electric III. Co., labor, &c.,	1,031.01	
Chas. W. Morgan estate, drains, &c.,	160.00	
New Bedford & Fairhaven Street railro	ad, repairs	
to streets, &c.,	306.73	
Old Colony R. R., concrete, &c.,	2,354.92	
Sale of crusher,	150.00	
Hay,	115.09	
Horse,	75.00	
Pork,	173.50	
Second hand engine,	150.00	
Wheels,	15.00	
Sundry accounts,	8,745.03	
T. B. Tripp, drain, labor, &c.,	1,200.00	
Wamsutta Mills, labor, &c.,	500.63	16.269.25

INCIDENTALS.

Edison Electric Ill. Co.	Edia	son i	Elec	trie	III.	Co.
--------------------------	------	-------	------	------	------	-----

200.00

NEW BEDFORD SCHOOL COMMITTEE.

Income	from	$``{\bf Trust}$	Funds,"	Sylvia	Ann	Howland	
,						M. M.	ж

bequest, \$3,000.00

Amount returned, 3.30 3,003.30

NEW BEDFORD WATER WORKS.

Sundry receipts as follows:

From takers, rates,	\$43,584.68	
For services,	3,530.99	
For main pipe sold,	143.99	
For meters,	108.00	
For off's and on's, fines,	106.00	
For rents,	104.00	
Sale of hay,	139.40	
Sale of wagon,	- 33.30	
Wharfage,	13.33	47,763.69

PERMANENT DEBT.

Accrued interest on "Sewer Bonds" of October 1, 1886, 160.42

POLICE DEPARTMENT.

Received of the Third District Court of Bristol, and from other sources, as follows:

John Corey, amount returned,	\$14.00	
Horse hire, Besse case,	53.95	
Officer's fees and mittimuses,	3,375.84	
Poor Department,	4.00	
Rent of Court room,	400.00	3,847.79

POOR DEPARTMENT.

The receipts have been as follows:

CITIES AND TOWNS.

Acushnet,	\$137.80
Blackstone,	1.60
Boston,	118.26
Bridgewater,	70.00
Brookline,	82.00

1887.	TREASURER'S	REPORT.
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Carver,	75.00	
Chatbam,	34.00	
Concord,	88.86	
Dartmouth,	289.20	
Duxbury,	15.00	
Edgartown,	33.00	
Fairhaven,	92.00	
Falmouth,	151.00	
Fall River,	3.00	
Freetown,	118.00	
Grafton,	15.00	
Lawrence,	183.00	
Ludlow,	141.60	
Middleborough,	138.80	
Nantucket,	306.72	
Northampton,	10.00	
Norton,	102.70	
Pittsfield,	69.65	
Plymouth,	80.80	
Rehoboth,	68.00	
Rochester,	12.00	
Salem,	76.60	
Southwick,	88.00	
Taunton,	616.42	
Waltham,	13.90	
Wareham,	38.00	
Wellfleet,	155.45	
Westport,	207.50	\$3,632.86
Even state support and busials		9 900 #9

From state, support and burials,

2,399.52

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Alms-house, city:

Farm produce,	\$362.10	
Highway department,	130.15	
Fire department,	336.30	
Hugh McHugh,	38.60	
M. Sherlock,	10.00	
Truant school,	1,082.30	
Military aid,	288.00	
D. A. Snell, support of son,	38.00	2,285.54

Received for support at hospitals, outside relief, &e.,

Hannah Harrrington,	\$445.03
John McCullough,	10.91

128	CITY	DOCUN	MENT	No.	8. Fe	bruary,
F. H. Tripp, board	of son,		9	29.24		
B. R. Watson,			17	78.52		
Isaiah Wood, boar	d of son	1,	15	28.86		
G. W. Peckham,			. 1	2.00	*	
John Fox,				1.00		
Z. Ellis,				5.00		
C. S. Paisler,			1	0.00	820.56	9,138,48
	REAL 1	ESTATE T	'AX AC	COUN	T.	
Antone Caton, tax	of 1883.	,			\$16.88	
George P. Law, ta					18.28	
J. R. Linton, tax o	f 1878,				28.45	
W. J. Wood, estate	e, tax of	f 1883,			14.30	77.91
	REPAII	RS OF CIT	ry PRO	PERT	Y,	
N. P. Hayes, retur	ned,					3.85
SCHOOLS—DOG FUND.						
Received of the Co	ounty of	Bristol, or	ne half o	f the d	log licenses	, 782.52
	SCH	OOLS—IN	CIDENT	ALS.		
Amounts returned	, twice ε	audited,				6.60
	SC	HOOLS—T	EACHE	ERS.		
Amount returned,	twice a	udited,				32.00
	SEW	ER—CED	AR STR	EET.		
Of Highway depar	rtment,					163.82
	SEWER	S-GENE	RAL AC	COUN	T.	
Of sundry account	s,					1,456.79
						_,

TEMPORARY LOAN.

Received from notes issued by authority of the City Council, as follows:

New Bedford Institution for Savings,	\$152,000.00
F. S. Moseley, Boston,	295,000.00 447,000.00

UNAPPROPRIATED FUNDS.

The receipts were as follows:

	The recorpts were de removed		
	Betterments,—North Front street,	\$125.00	
	Thompson street,	75.00	
	Wilson street,	328.01	\$528.01
	Fees,—Milk Inspector,	\$82.00	
	Sealer of Weights and Measures,	68.27	150.27
	Interest,—On deposits,	\$2,734.77	
	On taxes,	557.70	
	Premiums on bonds,	1,231.50	4,523.97
	Licenses,—Butterine,	\$23.00	
	Circuses,	130.00	
	Liberty Hall,	20.00	
	Liquor,	15,187.50	
	Opera House,	40.00	
	Peddler,	100.00	
	Petroleum, etc.,	1,041.00	
	Skating Rink,	40.00	
	Wamsutta Mills Hall,	10.00	16,591.50
	Rents,—Armory,	\$800.00	
	City Hall,	360.00	
	Pope's Island,	25.00	
	Ward Room,	13.00	1,198.00
1	State Treasurer,—Corporation tax,	\$252.43	
	National Bank tax,	6,558.04	
	Tax on foreign ships,	3,446.38	
	Contagious diseases,	35.40	10,292.25
	Amounts on Rolls not called for,		74.34
	Permits to enter sewers,		270.00
6	Sale of old materials,		2.83
,	Tuition of non-resident pupils,		403.18

Amounts received for sewer taxes:

Acushnet avenue.	\$339.94
Ash street,	19.86
Austin street,	709.12
Blackmer street,	95.54
Campbell street,	360,90
Cedar street,	248.24
Coffin avenue,	1,1 9.33
Court street,	370.50
Cove street,	275.53
Durfee street,	445.35
Hawthorn street,	627.60

Total receipts, including balance, J.	an. 4, 1886,	\$1	,116,967.00
Union street,	137.22	7,382.61	41,416.96
South Water street,	86.99		
South Second and Coffin streets,	270.00		
Smith street,	2.50		
Rockland street,	1.65		
Robeson street,	516.52		
Purchase street,	109.77		
Parker street,	102.14		
Park street,	141.62		
North street,	1,031.37		
Lindsey street,	249.24		
Hillman street,	44.17		
Hicks street,	87.51		

PAYMENTS.

Payments have been made upon the warrants of the mayor, as follows:

Alms-house laundry			\$2,204.80
Cemeteries,			3,853.56
Com. of Mass., aid,	chapter 252,	\$6,122.00	
66	301,	3,265.50	9,387.50
Fire Department,			30,490.00
Free Public Library	·,	\$4,787.11	
46 66	building extension,	16,044.77	
66 66	dog fund,	490.00	
"	trustees' account,	3,905.22	25,227.10
French Avenue Imp	rovement,	•	7,985.13
Highway Departme	nt,		90,256.23
Incidentals,			31,399.00
Light Department,			27,767.90
New Bedford and F	airhaven Bridge,		1,322.98
New Bedford Water	· Works,		77,611.06
Police Department,			49,025.23
ee ee 8	Station, Weld and Bowdite	eh streets,	9,202.80
Poor Department,			44,650.35
Permanent Debt,—I	Principal,	\$35,000.00	
]	Interest on Bonds,	64,232.50	
	" Trust Funds,	6,246.00	105,478.50

Public Schools,—Committee's account,	\$3,383.82	
Dog Fund,	400.00	
Incidentals,	22,273.26	
Repairs of buildings,	5,206.86	
Teachers,	75,902.24	
Truant,	1,924.70	109,090.88
Public Schools,—Furnishing Thompson Street,		1,124.88
Repairs of City Property,		4,638.37
Real Estate Tax Account,		83.81
" 230 Cedar street,		983.12
Salaries,		13,540.00
Sewers,—Austin Street, No. 1,	\$1,284.64	
" No. 2,	446.76	
Blackmer Street,	216.99	
Cedar Street, No. 3,	648.43	
County Street,	464.41	
Division Street,	1,681.01	
General Account,	12,260.16	
Hawthorn Street, No. 2,	1,555.09	
Lindsey Street,	30.51	
Robeson Street, No. 2,	779.53	
Rockland Street,	33,079.05	
South Second Street,	210.18	
Union Street,	334.82	52,991.58
Street Extensions,—North Cottage Street,	\$10,600.00	
" Cypress Street,	2,001.60	12,601.60
Sinking Fund,		10,000.00
Temporary Loan,		392,000.00
	- \$	1,112,916.38
Balance, eash in Treasury, Jan. 3, 1887.	"	4,050.62
	-	1,116,967.00

In Board of Aldermen, March 10, 1887.

Received and ordered printed in the City Documents, and sent down for concurrence.

D. B. LEONARD, City Clerk.

In Common Council, March 10, 1887.

Concurred.

WM. A. MACKIE, Clerk.

STATEMENT

OF THE

SINKING FUNDS,

FOR THE

Financial Year ending Jan. 3, 1887.

IN BOARD OF ALDERMEN,

Jan. 27, 1887.

Received, ordered printed in the City Documents, and sent down for concurrence.

D. B. LEONARD, City Clerk.

In Common Council, Jan. 27, 1887.

Concurred.

WM. A. MACKIE, Clerk.

REPORT

OF THE

TREASURER OF SINKING FUNDS.

CITY OF NEW BEDFORD,
TREASURER'S OFFICE, January 3, 1887.
To the Commissioners of Sinking Funds of the City of
New Bedford:

Gentlemen,—I herewith most respectfully present to you my account as Treasurer of the Sinking Funds, for the financial year ending at this date.

From the statement here presented it will be seen that there are three classes of bonds of a late issue that are now secured by sinking funds, namely: Eighty thousand dollars, City of New Bedford Improvement Bonds, issued April 1, 1885, for ten years; twenty-five thousand dollars, City of New Bedford Improvement Bonds, issued April 1, 1886, for ten years; and thirty thousand dollars, Sewer Bonds, issued April 1, 1886, for twenty years.

A Sinking Fund was also established on the 11th of November last, to secure thirty thousand dollars of Sewer Bonds, dated October 1, 1886, and made payable in twenty years from date, requiring an annual appropriation by the City Council of one thousand two hundred dollars. The first installment of this fund will be placed in your hands soon after the general appropriations for the year are acted upon.

RECEIPTS FOR THE YEAR.

Appropriations by the City Council:

For \$80,000 Bonds issued April 1, 1885, \$6,500.00 For 25,000 Bonds issued April 1, 1886, 2,300.00

For 30,000 Bonds issued April 1, 1886, 1,200.00 10,000.00

Interest on investment, 533.14

\$17,162.13

INVESTMENT FOR THE YEAR.

Deposit in the National Bank of Commerce on interest, credited monthly,

credited monthly, \$16,628.99 Interest to Jan. 1, 1887, 533.14

Total amount Sinking Funds at this date,

\$17,162.13

Respectfully submitted.

JAMES H. HATHAWAY,

Treasurer.

REPORT

OF THE

COMMISSIONERS OF SINKING FUNDS.

New Bedford, January 26, 1887.

At a meeting of the Commissioners of Sinking Funds of the City of New Bedford, it was

Voted, To adopt the foregoing statement of the Treasurer as the Report of the Commissioners of the Sinking Funds of the City of New Bedford, required by the General Statutes of Massachusetts to be made annually to the City Council.

I. W. BENJAMIN, WM. A. CHURCH, WM. H. MATHEWS, Commissioners.



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ANNUAL REPORT

OF THE

CHIEF OF POLICE

OF THE

CITY OF NEW BEDFORD.

TO THE

CITY COUNCIL,

FOR THE YEAR 1886.

NEW BEDFORD: MERCURY PUBLISHING CO., CITY PRINTERS. 1887.



REPORT.

NEW BEDFORD, Dec. 31st, 1886.

To His Honor the Mayor and Gentlemen of the City Council:

I have the honor to submit my sixth annual report, showing the condition of the force, and a synopsis of the work performed. One patrolman has been promoted to be lieutenant, one has died and two have resigned. Two patrolmen have been added, making the total strength of the force fifty-five officers and men and four housekeepers.

Eleven hundred and fifty-one (1151) arrests have been made during the year, classified as follows (on warrants 170):

Assault and battery,	78	Keeping unlicensed dog,	1
Arson,	1	Larceny,	44
Assault on an officer,	1	Malicious injury to real estate,	2
Abortion,	1	Malicious mischief,	10
Adultery,	6	Non-support,	24
Breaking, entering and larce	ny, 7	Obtaining money under false	
Being present at an illegal ga		pretence,	1
Common nuisance,	2	Obtaining goods under false	
Cruelty to dumb animals.	1	pretence,	5
Disturbing the peace,	49	Obstructing officer,	:3
Drunkenness.	807	Peddling without license,	1
Embezzlement,	4	Refusing to assist an officer,	1
Fast driving,	1	Selling liquor to minors,	6
Gambling,	6	Stubborn children,	2
Gaming on Lord's day,	3	Stealing a ride,	3
Idle and disorderly,	11	Threatening bodily harm,	1
Illegal sale of liquor,	2	Selling adulterated milk,	3
Insane,	29	Tramps,	:3
Keeping liquor nuisance,	11	Vagrants,	8
Keeping noisy and disorderl	у	Violation Lord's day,	2
house,	5	Trespass of fowls,	1
Keeping gaming house,	1		

NATIVITY OF PRISONERS.

Americans,	493 (Portugal,			27
British Provinces,	19	Sweden,			1
Canada,	26	Scotland,			18
Ireland,	416	Poland,		`,	อั
England,	98	Brazil,	1		1
France,	18	Sandwich Islands,			1
Germany,	22	West Indies,			2
Italy,	3	Wales,			1

Of the persons arrested 473 were Americans and 658 were foreigners, 1003 were males, 148 were females, 328 were non-residents, 68 were minors; 570 were committed to prison, 23 to the work-house, 29 to the Insane Asylum, 10 were found not guilty and discharged, 6 were delivered to out-of-town officers, 85 nol prossed, defaulted or their cases are now pending, and 428 paid fine and costs.

MISCELLANEOUS BUSINESS.

Value of property reported	Fire alarms given, 4
stolen, \$714.00	Fires extinguished without
Value of property reported	alarms,
recovered, \$194.00	Intoxicated persons helped
Buildings found open and	home,
secured, 55	Lost children found and re-
Cases investigated, 692	stored, 8
Defective streets and side-	Street obstructions reported, 1
walks, 47	Stray teams put up, 4
Defective drains and vaults, 3	Water running to waste, 22
Disturbances suppressed, 138	Horses found east, 4
	Dogs killed, 13

Thirteen hundred and twenty-seven (1327) persons have been furnished with lodgings during the year, of whom 1323 were males and four were females; 630 were Americans and 1220 non-residents.

NATIVITY OF LODGERS.

United States,	630	Italy,	1
Canada,	9	Portugal,	1
Ireland,	397	Sweden,	7
England,	243	Scotland,	24
France,	4	Spain,	1
Germany,	9	Denmark,	1

Very respectfully your obedient servant,
ISAAC B. TOMPKINS,
Chief of Police.

In Board of Aldermen, January 13, 1887.

Received, ordered printed in the City Documents, and sent down for concurrence.

D. B. LEONARD, City Clerk.

In Common Council, January 13, 1887.

Concurred.

WM. A. MACKIE, Clerk.





ANNUAL REPORT

OF THE

SUPERINTENDENT OF STREETS

OF THE

CITY OF NEW BEDFORD,

TO THE

CITY COUNCIL,

FOR 1886.

NEW BEDFORD:
MERCURY PUBLISHING CO., CITY PRINTERS.
1887.



REPORT.

New Bedford Street Department. Superintendent's Office, January 1, 1887.

To the Honorable Mayor and City Council of the City of New Bedford:

Gentlemen: Herewith I have the honor to submit my annual report, giving location and cost of work done in the departments under my charge during the year 1886, together with schedules of property belonging to the departments, and the estimated value thereof.

Very respectfully,

NATHANIEL H. GREENE,

Superintendent of Streets and Sewers.

TABLE NO. 1.

MACADAM STREETS, NEW AND OLD.

Streets.	Between what points.	Length. Feet.	Tons stone.	. Cost.	Remarks.
Acushnet ave.	Acushnet ave, School and Walnut,	280		\$23.50	Repaired.
7.5	Lund's corner south,	5,000		386.03	Grade changed.
Allen.	Page and Rural.	1.200	1,629	1,643.88	New, twenty-six feet wide.
Court,	Park and Reed.	2,448	2,669	2,518.49	New, 19 feet wide, begun last year.
County.	South and Washington.	255	312	395.15	New.
23	Division and Rockland,	1,778	366	708.44	Raised grade.
9.9	Middle and Morgan,	400		23.10	Repaired.
Darfmouth.	Cemetery gate and Dartmouth				
	line,	1,500	3,364	3,487.97	New, thirty feet wide.
Emerson,	Court and Elm.	306	514	592.01	New, twenty-seven feet wide.
Fifth.	School and Madison,	560	597	682.55	New.
Pleasant.	Pearl and Sycamore,	785	827	955.79	New, seventeen feet wide.
99	High and Middle.	215	89 T	421.41	New, twenty-eight feet wide.
9.9	Union and Market,	200	234	252.75	New.
Pearl.	Acushnet avenue east,	260	432	372.96	New, twenty feet wide.
Reed.	Kempton and Court.	1,007	1,047	1,078.88	New, part old stock from Kempton st.
Rockdale ave.	Durfee street north,	1,406	1,847	1,579.89	New, twenty feet wide.
Robeson,	County and Ashland,	200		13.50	Repaired.
Seventh,	School and Union,	427	388	439.18	New.
School,	Seventh and County,	337	371	377.68	New.
Second.	Cannon and Coffin.	. 580	338	360.13	New.
9,9	Coffin and Madison,	240	34	73.26	Repaired.
7.7	Union and Spring,	175	20	123.02	Repaired.
William.	Purchase and Pleasant.	236		43.20	Repaired.
, 99	Eighth and County,	200		37.63	Repaired.
		19,695	15,497	\$16,590.40	

TABLE No. 2.

STREETS GRAVELED AND GRADED.

Remarks.	Deep fill.
Cost.	\$129.81 1,734.97 1,734.97 132.00 33.95.30 1,001.75 11.
Length.	2,300 1,450 1,450 1,450 1,450 1,450
Between what points.	Potomska and Delano, Lund's corner and Freetown line, Court and Union, Coutage and Ash. Dartmouth street west, Acushnet avenue and Main road, French avenue and Middle road. County and water, Thompson street south, Weld and Cedar Grove, Dartmouth and Allen, County street and then, County street and the river, French avenue west. Smith and Robeson, Acushnet avenue and Purchase street. Linden and Cedar Grove, Purchase and County, Reach street west, Linden and Gedar Grove, Burchase and Cocust, Reed street west, Reak street west,
Streets.	Acushnet ave., Acushnet ave., Ash, Arnold, Babbitt. Belberille road, Butler. Banker, Bowditeh, Borden, Borden, Coder Gove, Cover road, Cypress, County, Count, Court, Court, Crapo, Court, Crapo, Court, Crapo, Court, Crapo, Court, Crapo, Cottage, Clark,

TABLE NO. 2.

STREETS GRAVELED AND GRADED-Concluded.

Remarks.	By special appropriation of \$8,000.00 Deep fill.
Cost.	\$21.42 122.10 55.83 85.89 86.75 161.68 73.20 7,985.13 175.50 1175.50 116.16 116.16 117.90 17.90
Length. Feet.	1,500 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 3,200 3,200 3,200 1,020 3,200 1,020 3,200 1,020 3,200 1,020 3,200
Between what points.	Court and Hillman, Kempton and Court, County and Crapo, Shawmut and Rockdale avenues, Court and Kempton, Potomska and Division, Walnut and Bedford, Court and Kempton, Cedar Grove and Coggeshall, Dartmouth and Sears, Shawmut avenue west, Ash and Newton, Water and Second, Dartmouth and Harrison, Kempton and Court, Front street and the river, Courty and Crayo, Gedar and Cypress, County and Crayo, French avenue west, County and Crayo, French avenue and Butler street, Gedar and Second, French avenue and Butler street, French avenue and Butler street, Beech street and Rockdale avenue,
Streets.	Chancery, Chapatchet lane, Division, Durtee, Emerson, Elm, First, Fourth, Florence, Front, Front, Grand, Hillman, Hillman, Hickory, James, James, Jenney, King Philip road, Locust, Nosher: Middle road, Mill, Mechanics lane,

D. 623 611	леер ши.						Grade raised.								
13.93 866.91 34.15 15.60	542.53 572.01 135.53	16.95	251.30 84.42	31.55	182.45 54.95	25.95 47.80	498.95	33.70	989.20	19.85	27.66	70.88	38.15	142.45	\$26,761.85
6,000	1,500	2,400	500 925	150 3,000	510 700	175	1,200	500 175	1,550	000	200	1.425	275	1,320	89,960
First and Second, Peckham street and Plainville road, Cedar street west, Florence and Hunter.	Ash and Newton, Mt. Pleasant and Acushnet avenue,	Arnold street north, Kennton and Parker,	Rockdale avenue east, Purchase and Reynolds,	Weld street and Nash road, Mr. Pleasant and Dartmouth line,	Weld and Linden, Sveamore and Kempton,	Water street east,	County and Dartmouth,	Crapo street west,	Acushnet avenue and County street,	Weld and Linden, Cannon and Griffin,	Plainville and Hathaway roads, Arnold and Hawthorn,		Austin and Durfee,	Furchase and County, Acushnet avenue and the river, Allen and Oak,	
Madison, Mt. Pleasant, Maitland, Maxfield,	North, Nash road,	Newton, Ocean, Park	Parker, Penniman,	Purchase, Plainville road,	Pleasant,	Pine,	Fope, Rockland,	Rivet,	nock, Sawyer,	State, Second.	Shawmut ave.,	Tarkiln hill road,	Wilson,	Weld, Washburn,	(2)

TABLE NO. 3.

CURBING AND GUTTERS.

Cost. Remarks.	\$271.53 New seven-inch curb east side. 569.19 Grade of east gutter changed. 7.00 Repaired west side. 13.25 New gutter east side. 157.84 New west side. 157.82 New east side. 157.84 New corner. 155.22 New east side. 157.85 New both side, no curb. 18.45 New corner. 18.45 New gutters both sides. 18.45 New gutters both sides. 18.45 New gutters both sides. 18.45 New gutters both side. 16.62 Repaired south side. 16.63 New east side. 16.63 New east side. 16.64 New in curb, west side. 18.34 New six-inch curb, old gutter. 19.50 New six-inch curb, old gutter. 10.40 Repaired broad gutter. 10.40 Repaired broad gutter. 11.37 New west side. 11.37 New west side.
Length.	278 350 5,881 1,149
Between what points.	Pearl and Willis, Braleyville road north, Lund's corner south, Elm and Union, At Cedar Grove, Arrold and Clinton, "" "" Page and Brigham, Southeast corner Atlantic, At State, Robeson and Locust, Park and Reed, Cottage and County, At Hawthorn, Rivet and Thompson, Rivet and Division, Pearl and Pope, Campbell and Willis, At Robeson, Maxfield and Smith, Grinnell and Washington, Allen and Bedford,
Streets.	Acushnet ave., " Ash, " Anlen, Arnold, Austin, Cedar, Court, " County, " " " " " " " ".

166.04 15.00 147.12 9.95 19.51 15.88		25.15 25.16	
Tottage, Union and Arnold, Court and Morgan, Allen and Dartmouth, County and Eighth, Summer and Cottage, Spring and School,	0 - 7.52	High, Acushnet ave. and Second st., Howland, First and Second, Hazard, Purchase and Pleasant, Kempton, Chancery and Park, King Philip road, Acushnet ave. and Spooner's mill, Middle, Purchase st. and Acushnet ave., Sixth and County, Cottage and Ash,	tta,

TABLE NO. 3.

CURBING AND GUTTERS—Concluded.

Streets.	Between what points.	Length. Feet.	Cost.	Remarks.
South, Seventh,	Water and Front, Spring and School,	297 310 195	\$33.39 62.94 36.14	Repaired north side. Repaired east side. Density both sides.
Sixth,	Russell and Madison,	149	225.49	New curb 30 inches deep west side.
Sycamore, Summer,	County and Thomas, Smith and Sycamore,	213		Repaired north side. New curb, old gutter, east side.
State,	Maxfield and Hillman,	0000		New west side.
	At Hazard,	2		Repaired both sides. Repaired outter both sides.
(Smid.	Water and First,			Repaired gutter north side.
Union,	Cottage and Orchard,			Repaired north side.
Water,	Spring and Union,	07	33.00	New curb west side.
Willis,	Purchase st. and Acushnet ave.,	252	14.45	Repaired north side.
Washington,	Orchard and Fair,		11.30	Repaired south side.
		27,477	\$8,653.37	

TABLE NO. 4.

CONCRETE SIDEWALKS LAID.

Remarks.												st side.			at ride.					t side.						
,		West side.	East side.	West side.	Repaired.	East side.	West side.	West side.	East side.	West side.	West side.	Repaired west side.	East side.	West side.	Repaired we	East side.	North side.	West side.	South side.	Repaired east side.	North side.	East side.	West side.	West side.	West side.	East side.
Cost.		\$62.90	66.85	83.65	2.90	120.50	374.00	23.15	38.50	72.30	119.80	4.70	104.25	41.35	10.30	63.50	332.30	145.00	68.20	7.73	67.15	189.25	29.00	98.75	207.90	24.50
Square	yaitas	125 8-10		167 3-10		241	748	46 3-10	77	144 6-10	239 6-10	9 4-10	208 5-10	82 7-10	20 6-10	127	664 6-10	986	136 4-10	15 5-10	134 3-10	378 5-10	. 80	197 5-10	415 8-10	6+
Between what points.	2	Clinton and Arnold,	, ,,	Clinton and Maple.	Northwest corner of Logan,		Rockland and Rivet,	Rockland and Fair,	Pope and Pearl,	Grinnell and Washington.	Maxfield and Hillman,	South of Bedford street.	Wing and Grinnell.	99 0 99	22	Potomska and Rivet,	Fourth and Water,	Allen and Bedford,	First and Second,	Hillman and North.	Sixth and Eighth,	Elm and Kempton,	Pearl and Willis,	Hazard and Austin.	Linden and Weld.	Maxfield street south.
Streets.		Ash.	2,5	2.7	Venshnef ave.	9,9	County.	, (, ,),	9.9	Crapo.	Cedar.	Cottage.	Fourth.	133	9.9	9.9	Grinnell.	Green.	Howland.	Hill	Mechanics lane,	Pleasant.	Purchase,	,,	::	*,

TABLE No. 4.

CONCRETE SIDEWALKS LAID—Concluded.

streets.	Between what points.	square yards.	Cost.		Remarks.
Parker, Union, Willis, William, Water,	Chestnut and Summer, Ash and Arch, Purchase st. and Acushnet ave., Bethel and Second, Spring and Union, Sundry small penairs	113 5-10 57 185 3-10 150 3-10 60	\$66.75 28.50 92.65 75.15 80.00 10	Not finished. South side. North side. South side. West side.	North side.
		5.283	\$2,697.60		

TABLE NO. 5.

CINDER SIDEWALKS.

Remarks.		grade raised east side.																	Raised grade both sides.					
	West side.	Grade raise	Both sides.	North side.	Both sides.	Both sides.	South side.	West side.	West side.	North side	Both sides.	North side	Both sides.	East side.	Both sides.	West side.	East side.	West side.	Raised gra	West side.	West side.	North side	West side.	Both sides
Cost.	\$8.75 75.75	73.15	46.25	87.80	32.45	101.30	24.15	06.6	9.45	5.80	11.90	6.75	37.65	37.50	42.00	58.05	15.60	7.50	107.80	49.35	14.10	15.30	41.55	91.90
Length. Feet.	200	0.00 0.00 0.00	440	006	250	2,100	220	180	200	100	210	100	800	320	325	820	270	100	067	450	240	200	500	500
Between what points.	Lund's corner south,	Foromska and Delano, Hawthorn and Bedford.	Union and Court,	Page street and Dartmouth line,	Arnold street south.	Ashland street and Shawmut ave.,	Ocean and Tremont,	Cedar Grove street south,	Rockland street north,	Dartmouth street west.	Borden and Ash,	Borden and Cottage.	Durfee and Austin.	Rockland and Fair,	Rockland and Thompson,	Rivet and Division,	Allen and Dartmouth.	Kempton and Middle,	Park and Tremont,	Locust and Robeson,	Willis and Parker,	Chestmut and Cedar.	Parker and Locust.	Acreshnot ave and Rock street.
Streets.	Acushnet ave.,	:		Allen.	Atlantic.	Austin.	Arnold.	Bowditch.	Bonney.	Babbitt.	Bedford.	Bay.	('edar.	('rano,	. 33	County.	('ottage,	t 3	Court.	Cypress.	200	Campbell.	Chestnut.	Codar Grove

TABLE NO. 5.

CINDER SIDEWALKS—Concluded.

Remarks.	West side. South side.	East side.	Raised grade east side.	North side.	North side.	West side.	Both sides.	East side.	East side.	East side.	West side.	North side.	North side.	Repaired south side.	West side.	East side.	West side.	North side.	West side.	North side.	Grade raised north side.	South side.	South side.	North side.
Cost.	\$13.05 9.40	30.10	44.85	54.50	22.00	60.55	08.6	5.85	7.28	5.70	5.85	13.10	17.70	8.30	6.45	26.55	5.15	5.40	19.25	9.30	22.65	15.15	13.95	16.05
Length. Feet.	220	590	560	200	230	008	200	150	100	100	180	210	220		100	240	100	110	250	280	150	130	220	210
Between what points.	North from Parker street, Water and First.	Allen and Grinnell,	Cemetery gate and Dartmouth line,	Mt. Pleasant st. and Shawmut ave.,	Shawmut and Rockdale aves.,	North and Court,	Rivet and Blackmer,	Potomska and Rivet,	Rivet and Potomska,	Howland and Grinnell,	Cedar Grove and Washburn,	Dartmouth and Harrison,	Page and Tremont,	Purchase and County,	Kempton street north.	Rockland street south,	Kempton and Court,	Beech and Hunter.	Kempton and Court,	Acushnet ave. and Front street,	Chancery and Emerson,	Florence street west,	Purchase street and Acushnet ave.,	Beech street and Rockdale ave.,
Streets.	Chaneery,	Dartmouth.	3.9	Durfee,	23	Florence,	First.	9.9	Fourth,	Front.	99	Hickory.	Hawthorn.	Hazard,	Hunter,	Hall.	Jenney.	Kempton.	Lindsev.	Logan,	Middle.	Morgan.	Maxfield.	Mill.

Both sides, West side. Both sides. South side. East side. Repaired west side. West side. Raised grade north side. Raised grade north side. Both sides. South side. North side. North side. East side. West side. West side. Both sides. South side. West side. West side. West side. West side. West side. Both sides. South side. West side. West side. Both sides. Both side.	
2.6.60 1.6.10 2.6.60 2.60 2	\$2,072.76
150 200 200 200 200 200 200 150 150 150 150 200 200 200 200 320 320 320 320 320 32	25,630
Kempton and Elm, Dartmouth and Washington, Park street and Shawmut avenue, Second and Fourth, Grimnell and South, Sawyer and Coggeshall, Linden and Weld, Bonney street west, Crapo and Bonney, Linden and Clark, Potomska and Rivet, Chestnut and Spruce, Penniman and Cedar Grove, Acushnet ave. and Second street, Purchase street and Acushnet ave., Sycamore and Smith, North and Mill, County and Crapo, Cedar street west, Park and Tremont, Acushnet ave. and the river; Durfee and Austin, Summer and County, Cedar street west, Cedar street west,	
Newton, Orehard, Parker, Poromska, Prospect, Prospect, Purchase, Pleasant, Rivet, Rockland, Reynolds, Second, Sycamore, Sycamore, State, South, Sawyer, Samwer, Thompson, Trinity, Thompson, Trinity, Wills, Wills, Wills,	

TABLE NO. 6.

PAVING NEW AND OLD.

Remarks.	Repaired. New. Repaired with block paving. New, part block paving. New, part block paving. Repaired.
Cost.	\$546.82 926.83 10.83 10.15 10.15 10.15 11.5 11.5 11.5 11.5 1
Length. Feet.	7.95 2.266 2.362 1,362
Between what points.	Union and Pearl, Spring and Madison, Middle and High, Cedar Grove and Coggeshall, At County, Water and Front, Pleasant and Purchase, School street north, Spring, and School. At Spring, At Pleasant, Jenney street and Rockdale ave., At Pleasant, Front and Second, At Pleasant, Front and Second, At Pleasant, Purchase and Pleasant, William and Elm, Purchase street and Acushnet ave., William and Elm, Purchase street and Acushnet ave., Second and Front, Market and Elm, Fourth and Front, Second and Front,
Streets.	Acushnet ave., " " " " " " " " " " " " " " " " " "

70 Repaired. 67 Repaired. 10 Repaired. 60 Repayed with small stones. 10 Repaired.	
31.70 16.67 155.01 258.60 59.01	\$7,089.73
252	
Orehard and Cottage, Middle and Hillman, Grinnell and Cove, Purchase street and Acushnet ave., Sixth and Water,	
Union, Water, Willis, William,	

TABLE NO. 7.

FLAGGING, NEW AND OLD.

Remarks.	Repaired both sides. Repaired west side. Repaired south side. Repaired south side. Repaired south side. New east side. New east side. Repaired both sides. Repaired both side. Repaired south side. Repaired north side.
Cost.	\$97.02 46.92 46.92 8.90 8.90 8.90 12.85 19.85 19.85 19.85 19.85 19.12 19
Length. Feet.	216 353 118 86 385 150
Between what points.	Walnut and Potomska. Weld and Cedar Grove, Union and Elm, Tremont and Atlantic, Court and Morgan, Union and Arnold, Pearl and Pope, Union and Hillman, County and Ash, Eighth and County, Elm and Spring, Spring and School, Fourth and County, Acushnet ave. and Second street, County and Cedar, Sixth and Eighth, Acushnet ave. and Ase, County and Cedar, Sixth and Eighth, Sixth and Eighth, Sixth and Eighth, Sixth and County, Acushnet ave., and Purchase and County, Spruce and County, Spruce and Cedar, Spruce and Pleasant, Foster and Madison,
Streets.	Acushnet ave., " Arnold, Cottage, " County, Codar, Court, Elm, Elighth, Frourth, Grimnell, High, Kempton, Mill, Mechanics lane, " " " North, Corchard,

Repaired west side. Repaired east side. Repaired east side. Repaired east side. Repaired east side. Repaired both sides. Repaired both sides. Repaired west side. New west side. Part new north side. Repaired both side. Repaired north side. Repaired both side. Repaired south side. Repaired south side.	
12.30 54.00 6.43 6.43 36.57 36.57 32.150 6.25 6.25 6.25 6.65 6.20 6.20 6.20 6.20 6.20 6.20 6.20 6.20	\$2,416.23
189	
Court and Union, Middle and Elm, Austin and Hazard, Pearl and Willis, Pope and Merrimac, Pearl and Marfield, William street and Mechanics lane, William street and Mechanics lane, William and Union, Union and School, Madison and Russell, State and County, Parker and Willis, County and Emerson, County and Emerson, County and Seventh, Seventh and Eighth, Cottage and Orchard, First and Second, First and Second, Pleasant and Sixth, Acushnet ave. and Second street,	
Orehard, "" Pleasant, "" Second, Seventh, Sixth, Sycamore, Sycamore, William, "" William, "" William, ""	

TABLE NO. 8.

CROSSWALKS, NEW AND OLD.

Streets.	Between what points.	Length. Feet.	Cost.	Remarks.	
Acushnet ave.,	Maxfield and Campbell,	46	\$32.35	New driveway east side.	
99	At Willis,	140	92.90	New east side.	
9.9	At Pearl,	80	60.75	New east side.	
***	At Maxfield,	24	7.48	Repaired west side.	
3	Grinnell and South,	20	7.00	Repaired driveway west side.	
*,9	At Bedford,	18	6.03	Repaired.	
Austin,	County and Ashland,	34	32.15	New driveway south side.	
Crapo,	Grinnell and Washington,	21	18.53	New driveway west side.	
Sounty,	At Forest,	97	35.55	New West side.	
99	At Sherman,	58	44.70	New west side.	
	At Thompson,	24	9.95	Repaired west side.	
ر ف	At Rockland,	32	7.10	Repaired west side.	
('edar,	At Maitland,	42	38.85	New west side.	
9	At Locust,	25	20.45	New west side.	
,	Robeson and Maitland,	20	17.55	New driveway west side.	
99	Kempton and Middle,	50	19.95	New driveway west side.	
Dartmouth,	At Borden,		5.15	Repaired west side.	
Elm,	At Pleasant,	84	39.43	New east side.	
Fourth,	Wing and Grinnell,	- 24	22.74	New driveway west side.	
first,	At Madison,	24	23.58	New west side.	
Frinnell,	At Fifth,	24	23.65	New north side.	
jawthorn,	At Ash,	87	46.30	New north side.	
Jincoln,	Arnold and Union,	54	15.05	New driveway east side.	
Inddle,	Purchase street and Acushnet ave.,	24	22.45	New driveway north side.	
	Sixth and County,	42	39.55	Two new driveways south side.	

TABLE NO. 8.

CROSSWALKS, NEW AND OLD—Concluded.

Remarks.	Repaired north side. New south side. Repaired south side. Repaired both sides. New both sides. New driveway north side. New south side.	
Cost.	\$5.65 23.65 5.65 11.60 52.95 21.83 23.75	\$1,638.40
Length. Feet.	24 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2,537
Between what points.	At Orchard, At Ash, At Purchase, At Purchase, At Acushnet ave., Acushnet ave., At Pleasant,	
Streets.	Union, William, Willis,	

TABLE No. 9.

BANK WALLS BUILT.

Remarks.	\$	
	New both sides. New east side. New east side. New east side. New east side. New south side. New south side. New east side. New east side. New east side. New south side. New east side. New east side. New south side.	
Cost.	\$169.62 239.02 35.20 121.72 221.00 17.230 38.25 249.56 11.75 11.75 13.25 143.40 21.13	\$1.436.20
Length. Feet.	526 510 150 150 150 260 60 60 610 94	3.337
Between what points.	Rivet street south, Cedar Grove and Coggeshall, Cedar Grove and Penniman, Coggeshall and Sawyer, Linden and Weld, Purchase and County, At south end of County street, Purchase and County, Court and Kempton, East of Acushnet avenue, Purchase and Bowditch, Division and Cove,	
Streets.	Bonney, County, Coggeshall, Cove road, Cover oad, Florence, Florence, Pearl, Sawyer, Water,	

TABLE NO. 10.

FENCES BUILT.

Streets.	Between what points.	Cost.	Remarks.
Cove road, County, Pope, Union,	Crapo and Dartmouth, Penniman and Cedar Grove, County and Chestnut, Park and Tremont,	\$40.70 49.50 5.32 132.84	New north side. New east side. New across the street. New both sides.
		\$228.36	

MISCELLANEOUS.

Sundry bills for repairs, and supplies furnished the	depart-
ment; not otherwise accounted for,	\$20,297.44
Trimming trees,	89.40
Removing snow and ice,	333.49
Cleaning streets and gutters,	2,066.84
Sanding sidewalks,	179.01
Repairs on steam road roller and crushers,	1,111.99
Filling holes, ruts, picking up stones, etc.,	1,798.29
Superintendent's salary,	1,200.00
Assistant superintendent's salary,	800.00
Hostler's salary,	780.00
	\$28,656.46
RECAPITULATION.	
Macadam, new and old,	\$16,590.40
Streets graveled and graded,	26,761.85
Curbing and gutters,	8,653.37
Concrete sidewalks laid,	2,697.60
Cinder sidewalks,	2,072.76
Paving, new and old,	7,089.73
Flagging, new and old,	2,416.23
Crosswalks, new and old,	1,638.40
Bank walls built,	1,436.20
Fences built,	228.36
Miscellaneous,	28,656.46
	\$98,241.36
CREDITS.	
Appropriation,	\$75,000.00
Received for labor and materials,	16,269.25
Special appropriation to repair French avenue,	8,000.00
	\$99,269.25
Expended,	98,241.36
	\$1,027.89
Transferred to incidentals,	\$298.56
Transferred to Division street sewer,	729.33
	\$1,027.89

INVENTORY OF PROPERTY

BELONGING TO NEW BEDFORD STREET DEPARTMENT, January 1, 1887.

22 horses,	\$3,575.00
7 double earts,	1,300.00
7 single carts,	675.00
I single gear,	80.00
2 double gears,	300.00
2 light wagons,	90.00
1 express wagon,	40.00
1 double lumber wagon,	115.00
1 single lumber wagon,	60.00
2 stone crushers,	1,000.00
2 portable boilers and engines,	1,350.00
1 derrick with wheels,	25.00
9 double harnesses,	315.00
9 single harnesses,	135.00
3 lead harnesses,	25.00
3 light harnesses,	50.00
176 old long handle shovels,	31.75
40 old short handle shovels,	11.00
6 small stone hammers,	6.00
28 sledges,	90.00
53 iron bars,	85.00
92 old pick-axes,	110.00
94 old hoes,	9.75
10 new hoes,	5.00
17 mattocks,	18.00
20 stone breaking hammers,	10.00
14 paving hammers,	19.75
12 stone chains,	9.50
19 dirt pounders,	8.00
16 paving pounders,	23.50
15 narrow axes,	7.50
8 spirit levels,	8.00
37 stone chisels,	11.10
8 stone sets,	4.80
10 paving brooms,	4.50
8 drilling hammers,	14.00
. 30 stone points,	8.50
7 striking hammers,	18.00
4 iron squares,	2.50

19 rakes,	\$6.00
5 blasting spoons,	1.20
100 lbs. nails,	3.50
1 shackle bar,	2.00
2 mops,	1.00
4 scythes,	2.00
5 billhooks,	3.50
7 wagon wrenches,	5.00
7 blocks east iron,	5.00
3 steel wedges,	2.75
1 three cornered seraper,	.50
8 plow points,	7.00
1 eross cut saw,	5.00
1 large key wrench,	4.00
1 socket wrench,	2.00
1 large ladle for lead,	.1.00
8 oil feeders,	2.00
9 oil squirters,	4.00
2 jack-screws,	9.00
125 feet small rubber hose,	5.00
50 feet 1-inch suction hose,	18.00
1 copper hammer,	1.50
3 pinch bars,	2.00
10 cold chisels,	4.00
7 monkey wrenches,	7.00
20 flat wrenches,	8.00
1 large harrow,	50.00
16 feed baskets,	10.00
15 stone tubs,	9.00
16 street horses,	14.00
3 trowels,	1.50
4 carriage robes,	25.00
8 bound stones.	6.00
3 stable pails,	2.00
18 horse blankets,	11.00
6 flagging tampers,	6.00
12 blowing drills,	13.00
6 ice spades,	2.30
54 snow shovels,	26.00
6 sets blocks and falls.	30.00
48 lanterns,	34.00
17 six tined forks,	18.00
5 hay forks,	2.50
4 hatchets,	2.00
4 hand-saws,	2.50
3 planes,	1.50

28	CITY	DOCUMENT	No. 10.	January,
3 rasps,				\$.50
2 augers,				1.00
2 bit-stocks and	six bits.			2.00
2 screw drivers,	,			.50
5 chisels,				2.00
1 drawing knife				50
4 small hammer				2.00
4 small wrenche	es,			10.00
6 large oil cans,				3.00
8 small oil cans,				4.00
3 wheel jacks,				3.50
1 sleigh,				50.00
8 water pails,				3.00
10 long handle s	scoop shov	rels,		7.50
12 short handle		,		8.00
3 sand screens,	•			12.00
25 hitching halt	ers,			10.00
6 ladders,				15.00
3 stone drags,				7.00
7 horse collars,				9.00
1 iron road rolle	er,			300.00
1 stone road rol	ler,			100.00
1 steam road rol	ller,			5,500.00
5 water tubs.				14.00
5 tool houses,				150.00
4 tool boxes,				13.00
2 plows,				12.00
2 snow plows,				24.00
500 bushels sand	l in pen,			25.00
3 tons hay,				60.00
6 iron wedges,				4.50
1 gravel lot on I	Reed stree	et,		900,00
2 tons straw,				28.00
20 bushels grain	١,			11.50
1 road scraper,				200.00
3 iron vises,				10.00
2 small hydrant	connection	ons,		10.00
4 tin tunnels,				.50
5 stoves and pip				50.00
20 lbs. babbitt n	netal,			5.00
2 belt punches,				1.50
1 pair pipe tong	s,			2.00
2 key sets,				1.00
10 lbs. zine,				1.00
50 lbs. tallow,				5.00
16 feet covering	stone,			4.00

Crusher eastings, 50.00 25 tons cobble paving stones, 25.00 26,000 block paving stones, 1,300.00 3 tons gravel, 2.40 2 large sleds for taking up ashes, 250.00 1 watering eart, 450.00 1 two horse dirt scraper, 10.00 18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	135 feet curbing corners,	\$87.75
26,000 block paving stones, 1,300.00 3 tons gravel, 2.40 2 large sleds for taking up ashes, 250.00 1 watering eart, 450.00 1 two horse dirt scraper, 10.00 18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	Crusher castings,	
26,000 block paving stones, 1,300.00 3 tons gravel, 2.40 2 large sleds for taking up ashes, 250.00 1 watering eart, 450.00 1 two horse dirt scraper, 10.00 18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	25 tons cobble paving stones,	25.00
3 tons gravel, 2.40 2 large sleds for taking up ashes, 250.00 1 watering eart, 450.00 1 two horse dirt scraper, 10.00 18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90		
1 watering eart, 450.00 1 two horse dirt scraper, 10.00 18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	3 tons gravel,	,
1 two horse dirt scraper, 10.00 18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	2 large sleds for taking up ashes,	250.00
18 wheelbarrows, 16.00 1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	1 watering eart,	450.00
1 two horse street sweeper, 375.00 6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	1 two horse dirt scraper,	10.00
6 iron wheelbarrows, 50.00 1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	18 wheelbarrows,	16.00
1 long handle spade, .75 1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	1 two horse street sweeper,	375.00
1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	6 iron wheelbarrows,	50.00
1 siekle, .50 6 lbs. backing and wedges, 1.00 15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	1 long handle spade,	.75
15 lbs. machine grease, 1.00 4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulic jack, 65.90	1 siekle,	•
4 sets drag plank, 10.00 1,200 feet flagstone, 200.00 560 feet crosswalk stone, 260.00 6 pairs rubber boots, 13.00 1 hydraulie jack, 65.90	6 lbs. backing and wedges,	1.00
1,200 feet flagstone, 200,00 560 feet crosswalk stone, 260,00 6 pairs rubber boots, 13.00 1 hydraulie jack, 65.90	15 lbs. machine grease,	1.00
560 feet crosswalk stone,260.006 pairs rubber boots,13.001 hydraulie jack,65.90	4 sets drag plank,	10.00
6 pairs rubber boots, 13.00 1 hydraulie jack, 65.90	1,200 feet flagstone,	200.00
1 hydraulie jack, 65.90	560 feet crosswalk stone,	260.00
	6 pairs rubber boots,	13.00
1*0 P 11:	1 hydraulic jack,	65.90
130 feet linen nose, 75.00	150 feet linen hose,	75.00

\$20,854.30

TABLE NO. 11. GENERAL SEWERS.

SEWERS BUILT.

Remarks.	15-inch vitrified pipe. 12-inch " 12 and 15-inch "	4,327.52 12, 15 and 24-inch vitrified pipe. 1,361.34 12-inch vitrified pipe. 1,555.09 " " " 30.51 12-inch vitrified pipe begun last year. 779.53 15-inch vitrified pipe.	29,079.91 Two rings of brick, 72.54 and 48 inches in diameter. 210.18 12-inch vitrified pipe. 334.82 15-inch
Cost.	\$758.68 972.72 191.07 484.61 652.54	4,327.52 1,361.34 1,555.09 30.51 779.53	29,079.91 210.18 334.82 \$40,738.52
Length. Feet.	612 732 206 470 350	1,274 1,004 996 611	2,590 . 313 9,383
Between what points.	County and Ashland, Ashland and Cedar, First and Second, Austin street north, Wing and Bedford, Only to Bordon and in Roudan	Darkmouth to Allen, Crapo and County, East line of E. Mandell's lot west, Kempton and Court, Hazard, County and Ashland, From 263 feet south of Rivet	street, north in Bonney street, west in Rockland street, and turns in Dartmouth to Oak street. Potomska street north, Park street west.
Streets.	Austin, No. 1, " No. 2, Blackmer, Cedar, County,	Division, Hawthorn, Lindsey, Robeson,	Second, Union,

TABLE NO. 12. GENERAL SEWERS—Continued.

SAND-CATCHERS BUILT.

	olasting rock. I on account of con-		
Remarks.	The cost of this was increased blasting rock. Partly dag and location changed on account of con-	laçı widi waler pipes.	
Cost.	\$148.58 126.47 141.16 167.59 178.67	144.34	\$906.81
Location.	East side, south of Pearl street, North side, west of First street, West side, at Leoust st, West side, north of Potomska st., West side, at Pearl street,	South side, at Purchase street,	
Streets.	Acushnet ave., Blackmer, Cedar. Front, Purchase.	Willis,	

TABLE NO. 13.

GENERAL SEWERS—Continued.

SAND-CATCHERS, SEWERS, AND SURFACE DRAINS CLEANED AND REPAIRED.

Cost.	\$4,944,48 1,634.85 \$6,579.33
Description and Location of work done.	Covering sewer east of Acushnet avenue, south of Rolling mill; surface drain, Cedar street, near Locust; surface drain, Sawyer street; repaired sand-catcher, Spring street west of Acushnet avenue; repaired sand-catcher, Spring street; at Swamp; repaired sand-catcher, Purchase street; repaired sand-catcher, Darmouth street; at Allen; repaired sand-catcher, at Second and School; sewer box at foot of Middle street; carting stock to lot; sand-catcher repaired, Fourth at Rockland street; surface drain, Purchase street; near Oneko mill; repaired sand-catcher, Weld; drain on Court street; surface drain, Purchase street, near Water; repaired sand-catcher, Malison street, near Purchase; repaired sand-catcher, County street, at County; surface drain, Park street, at Willis; cenetery drain in Babbit; eatcher, Shith street, sewer deeper; repaired sand-catcher, County street, near Mosher; Tripp's brook sewer cleaned and repaired; repaired sand-catcher, County, at Mosher; Tripp's brook sewer cleaned and repaired; repaired sand-catcher, Purchase street, at Penninans; surface drain, Cedar (Grove street, west of County; filler, ing up old water course of Tripp's brook; culvert on Dartmouth street; repaired sand-catcher, Cedar street, south of Kempton; repaired culvert, Rockdale avenue; inlet drain, First street,

RECAPITULATION.

Sewers built,	\$40,738.52
Sand-eatchers built,	906.81
General repairs,	4,944.48
Sand-catchers cleaned,	1,634.85

\$48,224.66

INVENTORY OF PROPERTY

BELONGING TO NEW BEDFORD SEWER DEPARTMENT, January 1, 1887.

2 large tool houses on wheels,	\$360.00
6 wooden pails,	.60
8 dirt pounders,	.50
2 small chains,	1.50
2 stone chains,	3.00
5 blasting spoons,	3.00
114 old long handle shovels,	50.00
16 old short	6.00
15 iron bars,	25.00
94 pick axes,	112.50
4000 feet old spruce plank,	28.00
33 arches and forms,	54.00
3 pairs pipe tongs,	5.00
2 water pails and dippers,	.62
6 two-quart iron dippers,	1.00
6 sledges,	. 20.00
6 hoes,	.60
2500 feet oak plank for sand-catcher covers,	175.00
2 sets, blocks and falls,	15.00
1 derrick,	11.00
3 chains with ropes,	2.50
6 mattocks,	5.00
1 hatchet,	.50
3 iron wheelbarrows,	25.00
1 monkey wrench,	.50
1 oil squirter,	.50
1 striking hammer,	2.75
52 small drills,	6.00
16 blowing drills,	18.00
5 lanterns,	4.00
2 oil cans,	′ 1.50

34 CITY DOCUMENT No. 10.	January,
1 bit-stock and bit,	\$1.00
6 drilling hammers,	10.00
756 feet 12-inch vitrified pipe,	272.16
42 " 20 " "	37.80
26 " 18 " "	18.72
88 " 15 " "	49.50
40 " 24 " "	58.50
6 " 8 " "	1.80
12 feet 24-inch iron pipe,	42.00
2 6-inch vitrified bends,	1.80
10 6-inch vitrified slants,	. 1.50
3 pieces canvas,	10.00
1 15-inch vitrified Y,	3.00
25 10-inch vitrified Y's and T's,	30.00
2 12-inch vitrified T's,	2.80
1 18-inch vitrified T,	2.38
1 trowel,	.50
2 axes,	1.50
4 stone chisels,	1.00
2 stone points,	.50
Man-hole and other eastings,	95.00
	\$1,580.03

NEW BEDFORD AND FAIRHAVEN BRIDGE.

John F. Akin, draw tender,	8	600.00
F. A. Soule, hardware,		5.52
Parker & Haskell, coal,		12.70
C. S. & B. Cummings, brooms,		1.00
Jethro Hillman, stock and labor,		451.85
Tillinghast & Terry, lumber,		68.21
Bryant Bros., salt,		2.20
J. F. Aiken, hired help,		2.00
Jonathan Handy, spikes,		4.79
Greene & Wood, lumber,		34.85
S. A. Tripp, stove pipe,		1.88
R. Smith, iron work,		9.06
T. S. Corson, coal and teaming,		4.75
Wm. R. West, labor and paint,		14.95
N. P. Hayes, hardware,		2.20
C. S. Paisler, cement and sand,		1.75
J. D. Driggs, iron work,		13.24
Walter F. Chase, stock and labor,		4.87
New Bedford street department, teaming and labor,		87.16
	\$1	,322.98

CREDITS.

Appropriation,	\$2,000.00
Expended,	1,322.98
Transferred to incidentals,	\$677.02



1887—CITY DOCUMENT No. 11.

ANNUAL REPORT

OF THE

BOARD

ΟF

OVERSEERS OF THE POOR

OF THE

CITY OF NEW BEDFORD,

FOR THE YEAR 1886.

NEW BEDFORD:
MERCURY PUBLISHING CO., CITY PRINTERS.
1887.

In Board of Aldermen, February 24, 1887.

Received and ordered printed in the City Documents and sent down for concurrence.

D. B. LEONARD, City Clerk.

In Common Council, February 24, 1887.

Concurred.

WM. A. MACKIE, Clerk.

1886.

MEMBERS OF THE BOARD.

Hon. MORGAN ROTCH, Chairman ex officio.
Ward I—MARCUS W. TABER.

d I—MARCUS W. TABER.

2—JOHN McCULLOUGH.

3—CHARLES S. PAISLER.

4—ATWOOD HOLMES.

5—GEORGE S. HOMER.

6—MONROE HOLCOMB.

Officers of the Board.

Secretary, CHARLES A. CLARKE, Jr.

Assistant Secretary, ELLA F. BUCKLYN.

City Physician, WILLIAM C. POST, M. D.

Superintendent City Almshouse, PELEG S. MACY.

Chaplain at Almshouse, REV. G. T. FLANDERS.

* HENRY R. WILCOX.

REPORT.

To the City Council of New Bedford:

Gentlemen: By the death of Mr. Charles A. Clarke, Jr., late secretary of the Board of Overseers of the Poor for 1886, which occurred in September last, the duty of presenting a report of the transactions of the Poor Department for that year was devolved upon the present Board.

At the outset it is fitting to state that, in addition to the death of their secretary, the Board suffered the loss of an esteemed associate, Atwood Holmes, whose death took place about a month prior to that of Mr. Clarke. The Board took appropriate notice of both events, unanimously adopting, and spreading upon their records, resolutions expressive of their high estimate of the character and ability of the deceased.

At the first meeting held after the death of the secretary, an order was offered "that the management of the Board for the present be conducted by Mr. Taber of the relief committee and the assistant secretary, until such time as a permanent secretary be elected;" which order, after being amended by an order fixing the pay of these officials at \$40 each per month, was adopted. The records of the office fully attest the accuracy and fidelity with which their duties were discharged.

From the books in the office we gather the facts and

figures following, which exhibit, mostly in tabular form, the gross expenditures of the department, with the receipts, for the year ending Dec. 31st last; a detailed account of expenditures each month for outside relief; the itemized expenditures monthly at the city almshouse; and other statistical information of interest to the taxpayers and others.

Respectfully submitted in behalf of the Board, by C. B. H. FESSENDEN, Secretary.

New Bedford, Feb. 1, 1887.

GROSS EXPENDITURES.

DETAILED EXPENDITURES FOR OUTSIDE RELIEF.

	\$4,262.54	2,055.07	2,392.39	4,237.67	1,733.95	2,004.01	3,640.83	1,748.00	9,449.69	3,767.36	1,465.38	2,352.86	21 002 200
Miscellaneous.	\$5.30	38.89	15.00				42.65			5.00	36.25	11.60	W 1 00 B W 1 W
City Wood and Coal Yard.	\$844.10	66.40	630.01	185.40	44.30	137.40	28.80	80.18	589.99	34.35	75.15	65.75	
Soard Outside.	_	\$31.50		12.00		19.50				93.00	28.00	19.50	-
Rents.		\$15.00		60.80			-		14.50	24.00			
() Mice Expenses and Furniture.	\$72.28	10.15	58.75	24.13	49.63	41.89	10.00	8.60	23.50	11.25	26.75	11.38	-
Horse Hire and Hacking.	\$30.20	29.50	25.00	31.50	46.40	35.05	39.75	25.00	28.50	45.50	1.50	18.50	-
.noitstroqensrT	\$24,14	47.57	15.00	16.75	148.10	95.20	9.30	19.87	35.20	52.25	64.38	7.43	-
Boots and Shoes.	\$52.00	25.75	31.15	22.50	48.75	36.75	18 75	18.15			12.50	5.25	-
Burials.	\$157.00	74.25	139.00	172.25	89.00	84.00	72.30	197.00	120.75	130.00	00.99	184 00	
Stationery and Printing.	\$20.61	87.27	24.90	34.39	78.59	67.78		2.65	7.80	1.45	29.40	1.25	
Physician and Medicines.	\$169.98	144.93	148.60	211.09	151.60	157.50	144.75	169.37	175.00	141.00	152.00	137.00	-
Salaries and Travelling.	\$155.53	110.08	111.83	108.33	108.33	108.33	108.33	108.33	108.33	25.00	135.00	80.00.	
Usah Orders.	\$226.65	959.00	209.50	226.25	228.65	212.20	311.83	255.20	213.85	233.00	288.95	176.30	-
sawoT bas sobio	\$153.27	263.93	62.05		258.50	158.41	76.50	60.85	5.00	138.00		331.90	
Lunstic Hospi- tals, &c.	\$1,028.98			1,897.34			1,926.17	202.43	85.42	2,098.40			
.soirooori	\$822.50, \$1	880.76	921.50	1,285.74	483.00	950.00	852.00	671.00	1,011.25	765.56	549.50,	1,303.00	
	January,	February,	March,	April,	May.	June.	July,	August,	September,	October,	November,	December,	1

ITEMIZED ACCOUNT OF MONTHLY EXPENDITURE AT CITY ALMSHOUSE.

1886.

Totals.	\$1,123.54	794.88	90*888	894.30	799.78	1,060.07	764.78	725,47	935.06	1.037.42	961.91	1,612.14	\$11,597.41
Miscellaneous.	\$75.81	9.00		17.00	74.13	31.50	36.72			1.10	22.63	142 46	\$410.35
Oils and Paints.	\$15.04	10.74	32.11	1.50	6.91	2.50	6.51			11.50		3.70	\$90.51
Medicines.	\$7.60	-	3.95			12.80	86.98	3.00	13.00			41.69	\$149.05
Superintendent Labor and Murs- ing.	\$312.01	330.83	321.36	316.50	324.36	315.10	365.54	306.26	334.50	321.36	316.50	393.70	\$3,958.12
Carriages and Repairs.	\$3.00			56.19	48.70	57.60		5.25	34.68	12.80	58.40	25.46	\$305.68
Repairs of Build-	\$56.68	14.05	4.53		7.75	44.43	45.70	45.03	2.25		28.16	34.30	\$282.85
Euch.		\$126.62	8.70	53.52	56.17	27.95	29.83	11.12		117.24	79.32	452.14	\$925.61
Hardware and siloofs.	\$26.34	-15		4.53	2.25	38.11		6.64	67.36	85.19	33.92	25.98	\$291.07
Furniture and Crockery.	\$16.81		10.85		7.63	7.59	3.00	5.23	5.25			12.71	\$69.00
Shoes, Hats and Leather.	\$38.08	30,36	12.36	13.10	5.50	11.75	23.50	3.25	53.11	1.70		12.65	\$205.36 \$69.00
Groceries.	\$111.02	150.69	153.46	229.35	43.68	217.02		132.36	148.15	187.93	129.88	152.58	\$1,661.17
Beef and Pork.	\$253.59	108.04	91.74	65.61	83.31	113.62	85.85	90.53	89.98	102.91	91.65	168.36	\$1,341.89
Dry Goods and Clothing.	\$56.65	13.83	28.91	19.23	23.87	103 32	6.15		33.45	25.13	37.73	50.41	\$101.68
Flour and Grain.	\$150.91		220.09	117.77	104.52	76.85	95.00	116.70	156.63	170.31	170.72	126.00	\$1,505.50
	January.	February.	March,	April.	Mav.	June.	July.	August.	September,	October,	November.	December.	Totals.

RELIEF EXTENDED TO PERSONS OUTSIDE OF THE CITY ALMSHOUSE.

SUMMARY OF EXPENDITURE.

DOMNIANT OF EATENDITUME.		
Gross cost, as per detailed statement, Receipts,	\$32,509.1 6,997.0	
Net, Paid for support of those chargeable to the city in state luratic asylums and reformatory institutions, and in other		08
cities and towns,	\$9,677.	15
Amount expended for poor residing in this city, including state paupers, and those having settlement elsewhere in the	gr S	
state,	\$22,862.	00
Average yearly expense of each family relieved,	\$34.	
Average expense yearly of each individual,	\$13.	
Number of families relieved within the year,		65
	457	
Having settlement elsewhere,	73	
r ····r	135	
Number of persons relieved,	, 16	55
Having settlement here, males, 496, females, 630		
Having settlement elsewhere, "71, "110 State namers "163 "185		
State paupers, "163, "185		
TRANSPORTATION.		
Number of families sent to their homes,		33
Number of persons in these families,	40	
Number of persons sent to the Tewksbury almshouse,	31	
BURIALS.		
Number of deaths,	1	27
Males,	65	
Females,	62	

INSANE.

Number of insane persons at the asylums during the year,
Males,
Females,
Number remaining at expense of the city, Dec. 31, 1886,

47

STATE REFORM.

Number supported at state reform schools during the year,
Males,
Females,
1

PAUPERS OUTSIDE THE CITY.

Number of families having settlement here and supported elsewhere (exclusive of lunatics and those in state reformatories), 40 Number of persons, 106 Cost of their support, \$1,508.41

ALMSHOUSE REGISTER.

Months.	Admitted.	Discharged.	Remaining.
January,	7	7	78
February,	6	11	73
March,	2	9	66
April,	2	11	57
May,	4	8	53
June,	4 .	8	49
July,	1	1	49
August,	3	2	50
September,	10	3	57
October,	10	8	60
November,	5	7	58
December,	9	3	64

Whole number during the year,		141
Discharged during the year,		78
Remaining, Dec. 31, 1886,		64
Average number,		. 59
DEATHS.		
	Males.	Females.
Number of deaths during the year,	8	4

Number sent to Tewksbury from almshouse,

1

WORKHOUSE REGISTER, 1886.

Monthly return.	Admitted.	Discharged.	Remaining.
January,	2	0	16
February,	3	1 .	18
March,	0	3	15
April,	3	2	16
May,	1	0	17
June,	2	3	16
July,	1	4	13
August,	3	3	13
September,	1 ,	2	12
October,	2	1	13
November,	3	3	13
December,	1	2	12

Whole number during the year,	47
Discharged during the year,	2å
Number remaining, Dec. 31, 1886,	20
Average number for the year,	15

TRUANT SCHOOL REGISTER, 1886.

Monthly report.	Admitted.	Discharged.	Remaining
January,	0	1	12
February,	0 ,	2	10
March,	1	2	9
April,	1	2	8
May,	0	1	7
June,	3	0	10
July,	0	1	9
August,	0	1	. 8
September,	2	. 0	10
October,	3	1	12
November,	0	0	12
December,	1	1	12

Whole number during the year,	24
Discharged during the year,	12
Number remaining, Dec. 31, 1886,	12
Average number for the year,	10

FARM PRODUCTS FOR THE YEAR 1886.

Hay,	95	tons.
Straw,	45	66
Oats,	150	bushels.
Peas,	28	66
String beans,	12	66
Potatoes,	315	6.6
Onions,	70	66
Carrots,	142	66
Beets,	195	6.6
Corn in the ear,	156	6.6
Turnips,	140	6.6
Parsnips	17	6.6
Dried beans,	7	66
Cabbage,	630	heads.
Sweet corn,	338	dozen.
Pumpkins,	3,600	pounds.
Squashes,	3,000	44
Beef,	661	44
Pork,	7,600	66
Veal,	427	6.6
Milk,	24,108	quarts.

ALMSHOUSE CREDITS.

From fire department,	\$403.40
Sales of produce,	295.00
Truant school,	1,082.39
Street department,	130.15
Board of soldiers,	288.00
Miscellaneous,	111.50
	\$2,310.44

SUMMARY OF EXPENSE.

Gross expense for the year,	\$11,597.41
Less credits, as above,	2,310.44
	\$9,286.97

Average yearly expense of each inmate, including an	average	
of 25 criminals and truants,		\$110.55
Average monthly expense,		\$9.21
Average weekly expense,		\$2.30

Annual Report of Physician to the Board.

Office of the Physician to the Board, City of New Bedford, December 31, 1886.

To the Honorable, the Board of Overseers of the Poor:

Gentlemen: During the year 642 patients have received the services of the physician, requiring 2690 visits at their homes and 1954 office calls have been made.

During the year 88 visits have been made to the almshouse.

The gross cost of medical attendance and medical supplies for the year has been \$1862.84.

The amounts of reimbursement I am unable to give, as the returns from cities and towns and from the state are incomplete.

Dividing the gross cost for the year, \$1862.84, by the number of patients, 642, gives \$2.89+as the cost per capita for 1886.

By the careful oversight of the committee on relief, and the thorough elimination of all applicants who were judged to be able to furnish their own medical attendance, the number of patients was reduced from 710 in 1885 to 642 in 1886.

At the beginning of the year 1886, a radical change was made in the system of furnishing medical supplies to the department of outside relief from that which was in force during 1885.

A contract was made with the physician to the Board to furnish medical attendance and medicines in full of all demands for the ensuing year for a fixed sum; namely, \$1620, or \$135 per month.

This contract was carried out during the year, and after careful consideration your physician deems it his duty to enter an humble but earnest protest against this method of controlling the cost of medicines for the department, for the following reason.

A contract may be entered into by a person, firm, or corporation, to supply an eleemosynary, or penal institution, with so many pounds of provision or tons of coal at a fixed price per unit.

Should the amount required vary from time to time, the amount of compensation will vary in the same proportion, and both the consumer and the agent of supply will be protected against loss by the variation, if the price agreed upon be just.

On the other hand, if a fixed price be agreed upon for a year's supply of anything so positively variable as medical supplies, the amount required depending as it does on the quality and amount of disease coming in our midst, then I say, that it is manifestly impossible for both contracting parties to be justly dealt with.

Should the amount of disease be greater than that estimated in fixing the price, the contracting physician will be the loser, and, vice versa, the municipality loses.

Should a municipality wish to avoid this dilemma, two solutions present themselves.

The physician may be paid a fixed salary, and his prescriptions filled by the druggists at large and charged to the municipality by them, or the municipality could procure medicines in bulk under the advice of the physician, and pay either him or some other person a fair compensation for their services in dispensing them.

Leaving this question your physician deems it his duty to call your attention to another of great importance.

It cannot have escaped your notice that the expenses of the department are annually growing larger by the increase of the sums paid for the care of the insane and feebleminded.

While for the maniacal insane there can be no better place than a properly appointed lunatic hospital, it seems to your physician that many paretics, dements, and feebleminded persons could be more economically provided for in New Bedford.

Should the attempts at abolishment of the truant school be successful, the department would have ready at hand a building sufficiently isolated from the main almshouse, suitably enclosed and well adapted for the care of these persons.

Hoping that these suggestions will merit your careful attention, if not your approbation, your physician, thanking you for the uniform and kindly courtesy which he has received during the past year, brings his report to a close.

All of which is respectfully submitted.

WM. C. POST, M. D.,
Physician to the Board.

ORDINANCE

In the Year Eighteen Hundred and Eighty-Six.

AN ORDINANCE

TO PROVIDE FOR THE WEEKLY AUDIT AND PAYMENT OF WAGES OF EMPLOYES.

Be it ordained by the City Council of the City of New Bedford, as follows:

SECTION I. The rolls for the labor and wages of all employes of the city who are entitled by law to be paid weekly, shall be made up to and including Saturday of each week; such rolls shall be delivered to the City Auditor on or before 9 o'clock of the Tuesday following such Saturday, and shall be payable on the Friday following each Tuesday. The several Committees and Boards shall meet for the examination, certification, approval and audit of bills for such wages and labor, at such times as will accomplish the preparation of such rolls and the weekly audit and payment of the same. Expenditures for labor in the New Bedford Water Works Department shall be examined, certified and approved in such manner as said Water Board shall adopt. All Ordinances inconsistent herewith are hereby repealed, provided that this repeal shall not affect the provisions now in force as to other expenditures and the audit and payment thereof.

In Board of Aldermen, July 8, 1886. Passed to be ordained.

MORGAN ROTCH, Mayor.

In Common Council, July 8, 1886. Passed to be ordained.

EDMUND WOOD, President.

A true copy.

Attest: DANIEL B. LEONARD, City Clerk.











